I have been a student of judiciaries, and judicial behavior, since the 1950s, and a futures consultant with judiciaries and other legal and political institutions since the 1970s. Over this time, I have learned, unlearned, and relearned many things about "the role of courts in society."

I have worked on matters of judicial foresight directly with fifteen American state or territorial judiciaries, and indirectly with all fifty-plus of them. I have done futures work with the US federal courts at various levels. I have consulted about the futures extensively with various units of the American Bar Association and with several state and regional bar associations, as well as with individual law firms. [1] I also lived in Tokyo, Japan for six years, teaching in the College of Law and Politics of Rikkyo University, and published research I did there on the Japanese judiciary. [2] During the 1980s, I was somewhat involved with the creation of the judiciary of the Federated States of Micronesia, and especially of the State of Ponape (Pohnpei). [3] I have also had the opportunity recently to do futures consulting with the Subordinate Courts of Singapore.

At the same time, I have also done futures consulting with legislative, executive, and administrative governmental groups, and with a variety of business, civic, educational, community, and nonprofit organizations.

Among the many things that I have learned over the years is that judiciaries are, as a rule, slightly, but significantly, more future-oriented than are any other public or private institution. I will say a word about that later in this paper.

First, however, I want to discuss a framework that I have found useful for understanding the present and envisioning the future role of courts in society. The framework came out of extensive future-oriented work I did with the Hawaii judiciary in the 1970s and 80s, which has been strengthened and deepened through my contact with many other judiciaries subsequently.

I began working with the Hawaii judiciary in 1971. [4] During the early and mid 70s I met with virtually all of the personnel of the Hawaii courts from the newest clerk typist to the most respected member of the Supreme Court. I conducted workshops, held seminars, discussed aspects of the future with them individually and in groups. At one point, over a two year period, I met almost every week with some judiciary subgroup or other. The purpose of those meetings was ultimately to develop a strategic plan for the Hawaii judiciary, based upon the needs and concerns of the members of the judiciary themselves--a democratic, participative approach to strategic planning.

In the final three day workshop which involved virtually all members of the judiciary, we used a technique called the "Delbecq Approach". [5] This is a method which works quite well with individuals, such as many of the members of the Hawaii judiciary, who prefer not to voice their views in front of other persons, but who are willing to express them anonymously in writing. This method also minimizes a "halo" effect in which underlings feel obliged to echo (or at least not contradict) something said by a superior. The Delbecq
Approach is thought to result in more honest and democratic individual, and ultimately group, preferences.

Using the Delbecq method, all written statements from each individual participant are posted, without attribution, so everyone can see them. Each statement is discussed, again in such a way that no one knows for sure who expressed the idea under discussion. Eventually the group ranks, by secret ballot, all of the ideas submitted. If necessary, there are "run off" votes in order to be sure that whatever ends up ranking highly truly represents the consensus of the group as a whole.

The process takes a considerable amount of time but we felt it was well worth it in order to be sure we tapped the main concerns of the entire judicial community.

After many hours of discussion and ranking, we finally came up with the number one priority of the Hawaii State Judiciary.

It was parking.

Parking spaces for the employees near their place of work.

This was the number one concern of the members of the Hawaii judiciary.

Not "justice." Not "a speedy trial." Not even "efficiency." None of the things that I expected might be their top priority.

Instead the main concern of the Hawaii judiciary at that time was that each employee have a convenient parking space for her car.

Those of us who had been involved in this long-range planning effort learned a very valuable lesson: If you ask the employees of an organization what their problems are, you may find out (and you may be able to respond to them) but you will also learn that their concerns, as employees, are not the same as those of the people who seek services from the employees. And the concerns of the "clients" may not be the same as those of the people who set up the organization in the first place, or who fund it now.

What we learned, and we learned it the hard way, is that there are many "dimensions" to the judiciary. If we wanted to develop a strategic plan which truly and fairly represented the needs of all of the people involved with the judiciary (and not just of a few) we needed to identify all of the dimensions of the judiciary, and all of the people who are concerned with each of those dimensions, and then to involve all (or representatives of all) of those people in the strategic planning process.

So, in Hawaii, we went back to the drawing board, and finally, after several more years, came up with a document, Comprehensive Planning in the Hawaii Judiciary [6], which identified five dimensions of the judiciary, and then tried to address, in the operationalization of the plan, all five.

One of the concerns is, indeed, parking. Or, rather, one dimension is, more broadly, the needs of the people for whom the judiciary is merely a place to work, like any other workplace.

The "Dimensions" of the Hawaii Judiciary
The five dimensions of the Hawaii Judiciary are outlined in Chapter Six, titled "The Conceptual Framework of the Judiciary," of Comprehensive Planning in the Hawaii Judiciary:

Dimension I: The Judiciary as a Branch of Government

Mission 1: To uphold the Constitution--the government it creates, the rights and liberties it guarantees, and the policies and principles which it embodies.

Dimension II: the Judiciary as a Dispute Resolution Forum

Mission 2: To ensure to the people of the State the highest standard of justice attainable under our system of government by assuring an equitable and expeditious resolution of all cases and controversies properly brought to the state courts.

Dimension III: The Judiciary as a Public Agency

Mission 3: To provide for, promote, and ensure the effective, economical, and efficient utilization of public resources in the administration of the judicial system.

Dimension IV: The Judiciary as a Subsystem of the Legal System

Mission 4: To promote the effective and expeditious administration of justice by and among the various subsystems of the legal system.

Dimension V: The Judiciary as an Institution of a Changing Society

Mission 5: To anticipate and respond to the changing judicial needs of society.

In the years since these five dimensions were first identified, I have consulted with a great many judicial and legal groups. While sometimes additional dimensions have been suggested (especially dimensions--or functions--which are somewhat more nefarious), when all was said and done, these five seem to persist as generic and essential.

I believe they provide the basic answer the question, "what is the role of the courts in society?" That role is to fulfill each of the missions identified under each of the five dimensions. No one dimension is more central or more important than the other. A properly functioning judiciary, now and for the future, privatized (if it comes to that) as well as public (as most are now), should determine precisely what its specific mission is, in relation to its specific society and culture, on each of these five dimensions, at least, and not on just one or two of them. It is possible, of course, that certain societies will expect their judiciary to perform other functions as well. These five at least provide a point of departure.

It is my conclusion, on the basis of my research as well as direct consulting experience, that when, for example, citizen groups are asked to think about "the future of the judiciary," they will not think about all five of the dimensions. Unless the matter has somehow be brought to their attention, when engaged in strategic planning, or otherwise trying to determine what it is a judiciary does, or should do, almost all people not directly working with or for the judiciary will think only of the judiciary's "conflict resolution" dimension (Dimension #2) and ignore the others.
Thus, only very rarely indeed do judicial planners squarely confront the fact that (in the presumptions of Anglo-Saxon political theory and rhetoric at least) the judiciary is one of the three independent "branches" of the tripartite system of government (executive, legislative and judicial--Dimension #1). Indeed, among the US state courts (in contrast with the US federal courts) there is very little reality to this hoary political doctrine: most state judiciaries do not see themselves as a truly "independent" branch, fully on par with the executive and the legislature. But all judiciaries are, or should be, and should proudly proclaim themselves to be independent, I believe.

On the other hand, the political theory states that this is a tripartite system of "checks and balances." No one branch is supposed to be superior over either of the others. Rather, there is supposed to be a healthy, dynamic, and equal "check and balance" between each of the three on a continuing basis. The judiciary is not dominant over the other two, nor is either of the others dominant over the rest. Each branch tests and extends its own limits, and is held in check by the other two who similarly seek to extend their power.

Or else Montesquieu's old theory is meaningless, and should be discarded, and the "independence" of the judiciary given up as a sham--which I most certainly do not favor.

In my experience, getting judiciaries publicly to acknowledge this first Dimension is very difficult; probably the most difficult of the five.

This reticence may in part be tactical: while they want to be as independent as possible, it might well be more effective for them to pretend they do not want to be independent. But if the denial is real, then a very important social function of judiciaries, now and for the future, is lost. I believe it is very important that the (checked and balanced) independence of judiciaries be proclaimed, exercised, and defended.

But this is only one dimension, and by no means the most important. To repeat, none of the five is more (or less) important than the other four. So, in addition to checks and balances from the other branches of government, this first dimension is also held in check, and balanced by, the other four dimensions of the judiciary itself.

It is clear that a judiciary is expected to be a fair, effective, and speedy "dispute resolution forum", though some judiciaries are, regrettably, neither fair, effective, nor speedy (while some might be a bit too speedy to be fair).

Clearly this second dimension has made great advancement over the years. There is little doubt that the American courts (for example) are much "better" dispute resolution fora now than they were one hundred or two hundred years ago. And, when considered in their longer historical perspective stretching back in British culture and politics, I believe the American courts are "better" now than they have been at any past time, though someone may want to find points here and there to dispute this blanket assertion.

Indeed, it is in the second and also the third dimension (the Judiciary as a Public Agency) that modern judiciaries excel (though there remains plenty of room for improvement!). The rationalization of judiciaries is part of the general project of "modernity"--transforming the episodic, personal, abusive, inefficient, "unscientific", "political" court room and judges of the past into the rational, solicitous, fair, efficient, scientific, objective and professional entities they (or many of them) are (or are said to be) today. The creation of a crisp and clean modern judiciary, with professionally-trained judges and administrators, has been the work of many private and semi-public organizations everywhere in the world over the 20th Century. [7]
At the same time, there has been a strong and growing movement away from what might be called a "judicial monopoly"--the idea (again, in the American case) that all conflicts have to be brought before a "judge" (augmented also sometimes with a "jury") who is a formal agent of the "state" and who applies the formalities of the adversarial process in such a way that, in a case and controversy brought properly before the court, someone is declared by the judge (and/or jury) to be the unqualified winner and someone else the unqualified loser, with few, or no, shades of gray in between. What is meted out here is "justice" according to "the law"--the one way "the state" wants the matter to be decided, which may or may not be what either of the parties--even the "victor"--really want as an outcome.

In contrast to this "judicial monopoly" idea, the concept of the "Multi-Door Courthouse" [8] has been widely discussed, and sometimes adopted in the US, with a variety of "alternative dispute resolution" techniques being permitted, or required, of which "the adversarial process" is only one, though often, if necessary, the final and ultimately authoritative technique.

There also has been some experimentation with what might be called "culturally-appropriate dispute resolution techniques", recognizing that how disputes are actually "settled" is more a cultural than a legal matter, and that, if true justice is to be done, a technique which emotionally and psychologically satisfies the parties to the dispute may be better than one which merely meets the formal requirements of "the law" [9].

In any event, there are scores of books and articles dealing with countless proposed or preferred juridical and administrative processes falling within Dimensions Two and Three. It is the stuff of judicial administration and judicial reform.

Even though it is often not formally recognized, it is "obvious" on a few moments reflection, that any "judiciary" is also situated in a stream of other institutions and customs which allow it to work (or which, sometimes, thwart its work). This is Dimension Four--the Judiciary as a Subset of the Overall Legal System. This means, among other things, that any strategic planning process for the judiciary must include, for example, the participation of members from the other two branches of government, as well as from the law schools, the bar, the police and law enforcement agencies generally, parole officers, welfare workers, prison officials--and, I believe, past and present prisoners--and the general public (future prisoners?), including participants from organizations which are deeply critical of the existing system of justice or who otherwise want to reform or improve or even do away with that system.

Since the number of people who have been directly involved in a judicial proceeding is relatively small, most ordinary people's ideas about law and the courts come either from their formal education, or from what they see or read in the media. In the US, formal public education gives scant attention to legal rights and judicial procedures. Most citizens get their ideas about law and justice from fictional or semi-fictional TV shows and films, and these sources are almost always erroneous legally and distorted factually. So what the public thinks it "knows" about law and justice in the US is, unfortunately for democracy, basically wrong. Nonetheless--or perhaps, as a consequence--it is highly desirable that representatives from educational institutions and the media be involved in any substantial rethinking of the role of judiciaries as well.
One of the many reasons judicial plans fail to be all the can and should be is that the "stakeholders" in the plan are defined too narrowly so as to include only people formally employed within "the judiciary" itself. It is vital that representatives from all of the public and private agencies mentioned above, and from the public at large, be actively involved if the resulting plan is in fact to be useful, and used fairly and effectively.

However, it is the final, Fifth Dimension--The Judiciary as an Institution of a Changing Society—that is the most novel, perplexing, and likely to be misunderstood or overlooked of them all. This is the dimension which recognizes and emphasizes the court's role as a future-oriented institution which has a special duty to see that society is sufficiently future-oriented in all of its policies and actions, always attempting to balance the needs of future generations with the needs of present generations. At the present time, hardly any institution even tries to assess much less to fulfill any special obligations towards the future, and yet some judiciaries have, though often without really understanding, or admitting, that they are doing so.

This certainly was the most surprising judicial dimension for me to discover. Like most people, I had been taught that judiciaries were conservative, backward, and precedence-oriented—the least future-oriented institution of modern society. But this is not the case. Or at least judiciaries are not only conservative and precedence-oriented. Some of them are also consequence-oriented.

And this is so regardless of the political ideology of any judge. It also has nothing to do with "judicial activism" or " judicial legislation." Judges, whether of the Right or the Left, (again, in the American case, at least) find that they are forced to make public policy about future-oriented issues, and to take consequence into consideration as much as precedence, regardless of what it is they decide substantively in these cases. Thus, more and more judges have concluded that they should try to act more responsibly towards the future by utilizing the theories and methods of futures research.

For more details on why I have come to understand that judiciaries are slightly, but significantly, more future-oriented than are most other public and private institutions, I refer you to Alternative futures of the state courts of America 2020 and especially to "The dancing judicial Zen masters". [10]

Recognition of the rights of future generations.

I believe that all humans need to become more overtly future-oriented than they have ever been before. Until recently, humans, individually and collectively, could scarcely do anything that significantly impacted the lives of future generations. Indeed, the proper posture of most societies was "backward"—towards their ancestors--rather than "forward" towards their descendants.

If people living in the present dutifully learned the ways and teachings of the past and faithfully passed them on to their children and grandchildren, then the members of present generations would do all they could, or needed to do, to enrich and protect the lives of generations yet to come.

This age-old perspective was challenged, and sometimes changed, by the coming of "modern times," with its belief in "development," "progress," and the positive value of continued "economic growth." According to "modernity", it is thus necessary and proper for present generations to reject many past ways and beliefs, and to learn new things. It is especially important that children not expect or want to live the same kinds of lives, with the same kinds of values and habits, by which their grandparents lived. Rather generational
discontinuity came to be viewed as necessary and desirable, because the future was becoming different and better for each passing generation. One thus learned not from the past--from tradition--but rather from science, and then changed the world for the better through technology.

Now many people believe we may be leaving future generations a world which is worse--not better--than the world we inherited from past generations. At the very least, more and more people are coming to see that it is necessary to find ways to balance the needs of future generations with the needs of present generations, and not permit present generations to "eat up" the future as they may be doing now.

This concern was vividly expressed by a formal Declaration of the Responsibilities of the Present Generations Towards the Future Generations adopted by Unesco on November 12, 1997.

The intention of the Declaration is to ensure a viable future for all coming generations. Its preamble recalled certain fundamental principles: "the necessity for establishing new, equitable and global links of partnership and intra-generational solidarity [] the avowal that the fate of future generations depends to a great extent on decisions and actions taken today and that present-day problems, including poverty, technological and material underdevelopment, unemployment and exclusion, discrimination and threats to the environment, must be solved in the interests of both present and future generations."

The 12 articles of the Declaration indicate what can and should be done to safeguard the needs and interests of future generations in the fields of education, science, culture and communication. Concerning the environment, for example, Article 4 states that "present generations have the responsibility to bequeath to future generations an Earth which will not one day be irreversibly damaged by human activity. Each generation inheriting the Earth temporarily shall take care to use natural resources reasonably and ensure that life is not prejudiced by harmful modifications of the ecosystems and that scientific and technological progress in all fields does not harm life on Earth." The idea is reinforced in Article 5 which stipulates that present generations "should ensure that future generations are not exposed to pollution which may endanger their health or their existence itself."

Emphasizing the importance of the cultural factor as well, the Declaration considers it to be the responsibility of present generations to "identify, protect and safeguard the tangible and intangible cultural heritage and to transmit this common heritage to future generations." (Article 7) This is also the thrust of the articles concerning development and biodiversity. There is, on the one hand, the question of ensuring "the conditions of equitable, sustainable and universal socio-economic development" (Article 10) and, on the other, of protecting the "human genome, in full respect of the dignity of the human person."(Article 6)

The necessity of striving for peace and respecting diversity and human rights are also parts the Declaration. Both present and future generations should be able to choose freely "their political, economic and social systems [] and to preserve their cultural and religious diversity"(Article 2); they should also learn "to live together in peace, security, respect for international law, human rights and fundamental freedoms" (Article 9) and to fight all forms of discrimination. (Article 11)

Unesco called upon all states, intergovernmental and non-governmental organizations, as well as individuals, to help disseminate the Declaration and to work towards its implementation within their area of responsibility.
Unesco's awareness of future generations goes back to its first Medium-Term Plan (1977-1982) which said that the idea of "the unity of mankind" presupposed "a deliberate choice of fashioning a common destiny with joint responsibility for the future of mankind." The third Medium-Term Plan (1990-1995) stressed the need for ensuring "the sustainability of resources for future generations."

In 1979, Jacques Cousteau initiated a worldwide campaign for a declaration on future generations which has gathered 5.5 million signatures. The Foundation of International Studies in Malta, and the Future Generations Alliance, of Kyoto, Japan, have created world networks devoted to helping present generations identify and then fulfill their responsibilities towards future generations. [11].

However, to my knowledge, only one judiciary has acted affirmatively on behalf of future generations. In the case, Oposa vs. Factoran, Jr., the Philippine Supreme Court in 1993 ruled that representatives of future generations have standing and thus can bring legal action to prevent environmental destruction which diminishes the quality of life of future generations.

The majority of the Court said, in part:

"Petitioner minors assert that they represent their generation as well as generations yet unborn. We find no difficulty in ruling that they can, for themselves, for others of their generation and for the succeeding generations, file a class suit. Their personality to sue on behalf of the succeeding generations can only be based on the concept of intergenerational responsibility insofar as the right to a balanced and healthy ecology is concerned. Such a right, as hereinafter expounded, considers the 'rhythm and harmony of nature.' Nature means the created world in its entirety. Such rhythm and harmony indispensably include, inter alia, the judicious disposition, utilization, management, renewal and conservation of the country's forest, mineral, land, waters, fisheries, wildlife, off-shore areas and other natural resources to the end that their exploration, development and utilization be equitably accessible to the present as well as future generations. Needless to say, every generation has a responsibility to the next to preserve that rhythm and harmony for the full enjoyment of a balanced and healthful ecology. Put a little differently, the minors' assertion of their right to a sound environment constitutes, at the same time, the performance of their obligation to ensure the protection of that right for the generations to come.

"The locus standi of the petitioners having thus been addressed, We shall now proceed to the merits of the petition.
"After a careful perusal of the complaint in question and a meticulous consideration and evaluation of the issues raised and arguments adduced by the parties, We do not hesitate to find for the petitioners and rule against the respondent Judge's challenged order for having been issued with grave abuse of discretion amounting to lack of jurisdiction" [12]

It must of course be added that the decision of the Philippines Supreme Court was made much easier by the fact that, unlike the US Constitution, "Section 16, Article II of the 1987 Constitution explicitly provides: 'SEC. 16. The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.' (para) This right unites with the right to health which is provided for in the preceding section of the same article: 'SEC 15. The State shall protect and promote the right to health of the people and instill health consciousness among them" [13].

Still, there must be some way to find such rights under the American Constitution and/or under common law. Someday, some American judge will. [14] And so will judges from
other jurisdictions, I feel sure. The well-being of future generations requires it, and many judges have already demonstrated a sustained willingness to be future-oriented in their judgments.

The future of courts and the end of "authority"

More and more people around the world, and not only in the US, are refusing to follow conventional, modern authority. Many have opted for some form of fundamentalism or other. Others have decided to believe only in themselves.

To some extent, in the instance case, this is nothing more than the basic American political belief which has always been a kind of libertarianism: "that government is best which governs least." "Don't tread on me." "God and my rights".

But there is a technological component greatly feeding this philosophical predisposition as well. It is electronic communication generally, and the Internet specifically.

More and more people who once were necessary and accepted gatekeepers of information and activities no longer are. The Internet is opening up the world to people and ideas in truly chaotic and random forms and ways that often fly in the face of what an "expert" thinks is the proper and necessary manner or sequence to learn or to do something--and this quite apart from any concerns about pornography or sedition.

Consider:

Even in the US with its pretense of a free and open press, Journalists once prided themselves in believing that they sought out "just the fact" and presented "all the news that's fit to print" to readers. Walter Cronkite confidently ended his nightly television broadcasts in the US with the statement, "and that's they way it is."

No one disputed him. If something did not appear on network TV (or in the major newspapers), it was not news, and essentially did not happen.

Of course, such "news" was not really "factual" and "objective". But it did effectively enable a very small number of skilled professionals to shape the minds and behaviors of nations.

No more. Now, anything, real or imagined, can and is reported by millions of people over the Net. TV news viewers and newspaper readers dwindle in number (as TV "news" becomes more sensational and "exciting" in order to hold readers, and as newspapers try to provide more local community information for the same reason).

"A recent United Press International poll found that computer users put more confidence in information that they find online than that gleaned from more conventional sources, such as newspapers and television. Forty-three percent of those polled said they trusted the accuracy of online information versus 35% for other media." [15]

Journalists are wondering about their future. More and more are becoming convinced that neither they, nor their media, will be as socially-significant in years to come as they were in the recent past.

Librarians were one of the earliest groups to recognize that their gatekeeper role was going to change with the new electronic media, anticipating by a decade the concerns of journalists and others. [16]
Most librarians have tried to protect their value by bringing computers, CD Roms, and the Internet into the library, and by maintaining their gatekeeper function as reference librarians. But their authority is eroding fast, and probably cannot last as people simply access whatever information they want from the Net.

Take my case in writing this paper, for example. I simply could not find most of the recent material I did find if I had been restricted to what I could discover in my university library (and the library of the University of Hawaii once had one of the best in the US). Almost all of the useful new material I found came while searching the Net--not the stacks (or even the online catalog) of any physical library.

Some university professors are finally beginning to understand what the Virtual University will mean to them, although most professors appear to be in total denial of the inevitable demise of the current vast system of publicly-funded and carefully accredited two and four year, "brick and mortar" institutions of higher education. [17]

Even doctors are learning that their patients are healing themselves after sharing their symptoms on the Web, and then trying out all sorts of recommended cures and nostrums recommended there, for better or for worse. There appear to be documented instances of patients having found valid cures on the Web after having been declared incurable by their doctor. [18]

And, recently, priests and other clergy are beginning to discover that by going online their parishioners have easy access to all sorts of religious ideas and practices from which they previously could have been safely shielded. Each believer is simply making up her own theology and liturgy from the incredible smorgasbord of beliefs all laid out for the taking on the Internet. [19]

Respect for politicians is at an all time low in the United States and still sinking. "The problem is not that politicians have lost touch with voters but that both groups have lost touch with reality," observed Jonathan Schell recently. [20]

Nation-states themselves appear to be disintegrating, and eventually may be replaced either with a new global "medievalism" of armed enclaves, or with networked global-localism. [21] Wired magazine generally is the first outpost of the global "Netizens"--a development related to age-cohort changes, as well. Woody Harrelson, head of the McLuhan/Reform Party, says "Let Washington tend to the atoms of aging baby boomers while we aim our browsers at bits of the future."

"If everyone can see the world from a different angle--if everything is relative and the dominant reality is virtual--where's the place called America?" "If you don't have a 'known' perspective, you can't judge anything," commented Howard Fineman. [22]

"Judge," indeed! How much longer do lawyers and the public judiciary believe they can be immune from these trends? Indeed, isn't ADR and the growing use of the "multi-door courthouse" a harbinger of even bigger changes to come in the "authority" (not to say, "authoritarianism") of most courts and judges?

Electronic communication technologies, including the Internet at present, is changing the concept of law, the substance of law, and the practice of law in many ways. Consider first how electronic communication technologies are changing the concept of law. This is a story very well told by Ethan Katsh:
"As we look at law during the past few centuries, we shall find that our model of law has coincided with the age of the printed word and is an outgrowth of it. Law as we know it would not be possible without the special properties of print. We expect certain things from it because the technology of print structured the capabilities and functioning of law in various ways. It is not 'fine print,' as much of the public believes, that characterizes the law, but print itself. Print affected the organization, growth, and distribution of legal information. The processes of law, the values of law, and many of the doctrines of law required a means of communication that was vastly different from handwritten, and a society that used something other than handwritten manuscripts to store information. Law before Gutenberg was different from law today and was different in significant ways." [23]

The printing press made it possible for the past to control the future as never before. Prior to the printing press, scribes merely took notes, under the judges direction, of what was said and done. With no verbatim transcripts of judicial proceedings possible, later judges could not be certain what was said and done previously. Thus, with most "law" residing in the minds of the judges and not in black and white on paper, judges could innovate and invent while pretending to follow strict precedence.

This ended with the printing press, printed judicial decisions, printed positive law, and especially printed constitutions.

Again to quote Katsh, "the purpose of maintaining links with the past is to restrict the pace of change and to provide citizens with a sense of regularity and stability. This is considered to be at least as important a goal as some of the law's other major functions, such as the achievement of justice or the settling of disputes." [24] "During the past five centuries, the law has had an unrecognized ally in working toward its goal of managing the pace of change. This silent partner, which has assisted in fostering a public image of law as an institution that is both predictable and flexible, is the communications medium that has dominated the legal process for the past 500 years, the medium of print." "As the new media [of the late 20th and 21st Centuries] begin to take on some of the duties performed by print, one of the consequences will be to upset the balance that the law has worked so diligently to achieve over several centuries." [25]

The rest of Katsh's book, and his newer one, [26] are brilliant, clear discussions of how electronic media will transform--indeed, are already transforming--everything about law and judicial administration of the past five hundred years, and especially of the past one or two hundred years.

So the concept of "law" has shifted from being the fluid oral statements of judges in the old medieval courts, to fixed print documents (expressed in written "constitutions" and "positive" laws), and now to being fluid electronic bits. With the advent of the interestingly-named "word processor" everything written now is just a draft which can be and usually is easily "cut and pasted" into other documents. Nothing is ever final. Everything is fluid, flexible, temporary. "Law" is now as temporary as everything else in the society it seeks to regulate.

But these bits, though fluid, are still "words" while the clear evolution of communications modes is away from abstract words to icons, and thence to simulations of the acts which the words are meant to symbolize. Law in the future will eventually not be expressed in words at all, but as dynamic 3-D audio/visual/tactile/olfactory simulations in cyberspace of proscribed or required behaviors. [27]

Electronic communication technologies are also changing the practice of law with a clear movement from geographically-defined "sovereignty" and "jurisdiction" with its physical
"court houses", "law offices" and "law libraries", to "virtual communities"--"netizens" (instead of/in addition to the geographical states' "citizens")--and to virtual courthouses and virtual law offices almost certainly globally-dispersed, if not, during the 21st Century, in fact spread throughout the inner solar system on the Moon, Mars, and various L-5 locations and all cyberpoints in between.

Thus while there is good reason now to focus on the emergence of a true "World Court" which can deal with all of the problems of our increasingly globalized planet, it is also good for future-oriented jurists to contemplate the emergence of a "Cosmic Court" as well which, being electronic--or "post-electronic"--is "located" wherever intelligence is found throughout the universe.

Finally, electronic communication technologies are changing the "persona" of law. Once upon a time, intelligence, such as it is, was a human monopoly. "Homosapiens!" we boastfully call ourselves. But with the rise first of "expert systems" and eventually of artificial intelligence, we can expect the rise not only of intelligent legal and judicial software, but also of cyber lawyers, cyber judges and the creation of a Bill of Rights of Robots. [28]

A year or so ago, I participated in a teleconference involving some judges and judicial administrators in Singapore and some IBM officials in Texas who were working with the Singapore Subordinate Courts in developing new court technology. "Big Blue" only recently had finally beaten world chess master Garry Kasparov by virtue, it seems clear to me, of the increasing superiority of artificial intelligence over human intelligence, and the long-standing dominance of human emotion over human rationality when push comes to shove, as it always does.

I reminded the participants of the historical sequence in the superiority of machines over humans when it comes to reasoning well: From tic-tac-toe, a game which is interesting to young children and primitive computers, but not to most adults and more advanced computers who soon figure out how always to make each game end in a draw if not in victory; to checkers which many adults but no computers still find interesting because it is also relatively simple to play to endless stalemates; and finally to chess, a much more complex game but nonetheless in principle one which should always end in a tie if played between two equally experienced and unfailingly rational players. The Japanese game "go" is probably the next most difficult game in this sequence, being an artificial construction of even more extraordinary complexity than chess, but nonetheless of ultimately finite choices.

However, the human construction which might lie immediately after "go" in finite complexity might well be "the law." Law pretends to be a vast matrix of options which ultimately reduce themselves to a large but finite set of rationally-determinable conclusions. Moreover, law is based upon the utterly absurd and totally unscientific assumption that humans are rational, that they can and should know and understand the law, and then use rational calculations about the law and its penalties before deciding to act in each and every situation in which each human must and does act.

Humans who wish to be more influential players in the legal game are required to subject themselves to three or more years of brainwashing called "law school," entering the school as nice ordinary human beings and exiting as lawyers whose thinking, speaking and writing has become anything but ordinary and natural but which does enable them more or less successfully to play and win the game of law. Some of these lawyers then become judges, beings of even higher levels of rationality and objectivity, whose duty it is to
articulate what is the law in specific cases of controversy. The job of the judges has been made easier for them by legislators who have significantly diminished judicial discretion by meticulously defined positive law, determinate sentencing, and every other device they can create so as to turn the judicial process into a predictable and automatic decision-rendering machine. [29]

Formal adjudication is becoming, in essence, nothing but a huge game of tic-tac-toe—or perhaps of chess (or "go") if you prefer--currently played by highly-paid children before an elevated but less-well-paid and often cross-dressing adult or panel of adults.

In Singapore, I proposed that IBM withdraw victorious from further chess games and turn its attention to the law. As a kind of "Turing Test," I suggested that "Big Blue" next be pitted against the brightest human judges in the world. A human jury would listen to the arguments made by both sides in dispute (which might well also be presented by artificial intelligences and not by human lawyers) and to the decision reached by the "judge," not knowing whether that decision was rendered by a human or by an artificial intelligence. If, after listening to, say, ten such decisions, the human jury could not uniformly tell whether the decisions were issued from a human or from a computer, then Big Blue would be declared the winner, the judiciary would be dismantled--or at least very significantly "downsized"--and all redundant lawyers and jurors required to find some necessary and honest work to do instead.

These developments are by no means inevitable--and certainly not obviously "good." But I do believe a very strong case can be made for this as a possible future, if not necessarily either a preferred or presently plausible future.

In his recent book, The future of law, Richard Susskind begins with the following story:

"It is said that one of the world's leading manufacturers of electric power tools invites its new executives to attend an induction course, at the opening session of which they are urged to consider a slide projected onto a large wall screen. The image put before them is of a gleaming electric drill and the executives are asked if this is what the company sells.

"The executives look uncertainly around one another and tend as a group to concede that, yes, this is indeed what the company sells. It seems like a safe bet. They are immediately challenged by the next slide, however, that of a photograph of a hole, neatly drilled in a wall.

"'That is what we sell', the trainers suggest with some considerable satisfaction. 'Very few of our customers are passionately committed to the deployment of electric power tools in their homes. They want holes. And it is your jobs as executives in this corporation to find ever more competitive, efficient, and imaginative ways of giving our customers what they want, of putting holes in their walls.'

"The suitably humbled executives are urged in this way to think about commercial ends not means; to focus on the needs of their customers and not to succumb to tunnel visioned, corporate enthusiasm for a particular (and perhaps quite transient) product range.

"There is a crucial message here for lawyers and indeed for every individual involved in the administration of law. For it is surely doubtful that clients and other citizens who become entangled in the machinations of the legal system are irreversibly tied to the way in which law is currently administered." [30]
What judicial "clients" want is fair, speedy, justice. They don't care whether they get it from a wigged barrister before a robed judge in a stuffy courtroom, or from a robot. Or whether they settle disputes peacefully among themselves without recourse to any third party at all.

Indeed, the true "role of courts in society" I believe is to strive to cease to exist. The most vital duty of courts now is to cooperate with other agencies of society, including education, to create a community--be it local, or global, or galactic--whose members can solve disputes by themselves and for themselves, as well as in the interest also of future generations, with no need for "courts" and "lawyers" at all.

The day before I presented my paper to the 3rd Asia-Pacific Courts Conference, in Shanghai, with these sentiments about the duty of courts to try to create a society which does not need them, the Chief Justice of the Singapore Judiciary, the Hon. Yong Pung How, ended his opening keynote address to the Conference by quoting the following ancient Chinese proverb which he said he found in a novel about Shanghai written, in 1879, by Jules Verne, :

"When swords are rusty and spades bright, 
When prisons are empty and granaries full, 
When temple-steps are worn by the footprints of the faithful 
and the courts of justice are overgrown with grass, 
When doctors go on foot and bakers on horseback, 
Then the Empire is justly governed."[31]

My sentiments exactly.

[*] Originally prepared for the plenary session, "The Role of the Courts in Society" Third Asia-Pacific Courts Conference, Hua Ting Hotel, Shanghai, China, October 7, 1998

Footnotes:


7. In the American case, these include the American Judicature Society, the American Bar Association (in general and in its many committees), the Federal Judicial Center, The National Judicial College, the National Center for State Courts, The State Justice Institute (a federal funding agency for state courts) and many more.


The American judiciary at present most actively and continuously engaged in judicial foresight is that of the State of Virginia. See their Future View. A Newsletter of Trends and Issues, published quarterly. Contact Beatrice Monahan, Supreme Court of Virginia, Office of the Executive Secretary, 100 North 9th Street, Richmond, Virginia 23219 USA. Email: bmonahan@courts.state.va.us. Website: http://www.courts.state.va.us

11. For the Malta group, see Busuttil, Salvino, et al., eds., Our Responsibilities Towards Future Generations, Malta, Foundation for International Studies, 1990. The Foundation also publishes a quarterly, Future Generations Journal. Contact: Emmanuel Agius, University of Malta, St. Paul Street, Valletta VLT 07, Malta. Email: fgp@mail.link.net.mt.


13. Ibid., p. 804.

14. See however, Tonn, Bruce, "The court of generations," Futures, 23 (5), June 1991, pages 482-498, which specifically proposes that a "court of generations" be established in the United States. The idea has been recently reintroduced in Pollard, Vincent and Tonn, Bruce, "Revisiting the 'Court of Generations' Amendment," Futures, 30 (4), May 1998, pages 345-352. Various other concrete proposals for institutionalizing the ethical responsibility of present generations towards future generations are included in the two volumes edited by Kim and Dator which are cited above in footnote 11.

The Factoran case centered on environmental issues. It is important to understand that environmental issues are only one of many matters of importance to future generations. Moreover, even though the representatives of future generations given standing by the Philippine Supreme Court were concerned about preserving the present environment for use by future generations, it is also important to realize that a "future-generations orientation" does not necessarily imply any specific policy preference. Representatives of future generations might just as well have proposed transforming what is left of the natural environment into a wholly artificial environment--if they were making this argument on the basis of their studied understanding of the needs and preferences of future generations in comparison with the needs and preferences of present generations.

To put it more directly, "future generations-orientation" does not privilege one policy preference over another. It requires that, whatever the policy preference is, that it be made after a careful consideration which balances the needs and preferences of present generations with the needs and preferences of future generations.

15. Information Week June 1, 1998.


24 Ibid., p. 18.

25. Loc. Cit.


27. While surfing the Web for some recent information on this topic, I encountered two particularly useful examples. One is a Web-based criminology course, "New media in criminology: Using new media in criminal justice research and education," taught by Prof. Cecil Greek, of Florida State University, which has a module devoted to games and simulations in teaching and researching law and criminology (http://www.fsu.edu/~crimdo/courses/week14.html [July 16, 1998]). The site is also well worth visiting as a splendid example of a Web-course per se. The second item is Exeter University's announcement of a MPhil/PhD Scholarship in Animating Legal Testimony which aims at evaluating "the potential of 3D visualisation tools in helping witnesses (expert and non-expert) communicate their evidence in a technologically-
advancedcourtroom."
http://www.dcs.exeter.ac.uk/~ajit/law/further_details/further_details.html
(July 15, 1998).

In a related development, Kaplan Educational Centers, a unit of Washington Post Co., in
October 1998 launched what it believes will be the first on-line law degree, Concord Law
School.

28. McNally, Phil, and Inayatullah, Sohail, "The rights of robots: Technology, law and

29. On the general desire to make justice more uniform and predictable, see, Pinkele, Carl,
and Luthan, William, eds., Discretion, Justice, and Democracy, Ames, Iowa State
University Press, 1985, and Walker, Samuel, Taming the System: The Control of

On the possibility of developing expert systems or artificial intelligence to make justice
more uniform and predictable, see International Journal of Applied Expert Systems
http://www.parent.qub.ac.uk/mgt/alans/abst2_1.html (July 15, 1998); R. V. De Mulder
and C. J. M. Combrink-Kuiters, "Is a computer capable of interpreting case law?"
http://ltc.law.warwick.ac.uk/elj/jilt/issue2/11demldr/ (July 15, 1998); Stein Schjolberg,
"Artificial intelligence / expert systems--Decision support systems for judges." http://www.mossbyrett.of.no/info/judges.html (July 15, 1998); Mike France, "Booting up
your personal lawyer," Worth, October 1995; Tom McMahon, "Don't blink, the law is in
the fast lane!" http://www.csalt.on.ca/review/mcmablink.html (July 15, 1998). Of course,
many people argue that we are a long way from any technology threatening, much less
eliminating, conventional courts, judges, or lawyers. In his presentation before the Third
Asia-Pacific Courts Conference in Shanghai, China, October 6 & 7, 1998, titled, "The
role of technology in the justice system," Richard Boon Teow Lau, Principal Director
(Administration) of the Subordinate Courts of Singapore stressed that few of the past
promises made for technology in the courts have come to fruition, and that he doubts the
promises for the future will be much different. Contact him at
<richard_lau@subct.gov.sg>.

It is worth noting that no judiciary in the world is as "high tech" already as the
Singapore judiciary. Mr. Lau's cautionary perspective is no doubt strongly influenced by
trying to get existing technology to work as expected. Visit the webpage of the Singapore

quotation however is from http://ltc.law.warwick.ac.uk/jilt/bookrev/3widdis/ (July 15,
1998).

Unpublished keynote address, Third Asia-Pacific Courts Conference, Hua Ting Hotel,
Shanghai, China, October 6, 1998, p. 25.