

ALTERNATIVE FUTURES OF FAMILIES, COMMUNITIES AND COURTS

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Introduction.

In my talk today, I intend to offer some thoughts about the futures of children and families, and of people who work for and with children and families.

But before I do this, I need to say a word or two about what futures studies is and is not, and offer a few observations about the past and present condition of children and families.

So let me ask you this. How many of you, in all of your education from kindergarten to whatever your last formal classes were, have ever taken at least one course that dealt primarily with the futures? Please raise your hands.

OK. Now, how many of you, in all of your education from kindergarten to whatever your last formal classes were, have ever taken at least one course that dealt primarily with the past? Please raise your hands.

Well, that is very discouraging. I have been teaching futures studies at the university level for almost forty years, and a few months ago published a book titled, *Advancing Futures: Futures Studies in Higher Education* (Praeger, 2002). The volume contains essays by thirty university professors from fifteen countries explaining the theories, methods, and content of their courses in futures studies.

But wherever I go, I get the same results you just demonstrated: the formal education system everywhere, higher and lower, ignores the futures while focusing heavily on the past.

By ignoring futures studies, education everywhere is doing us all a huge injustice, because it is only the futures over which humans have any influence. While, as we will see in a moment, there are no future facts, I can assure you that there also are no past possibilities. Only the futures is the realm of the "possible"--indeed, some French futurists call futures studies "Futuribles" in order to emphasize that fact. It is only in the futures that you can make a difference, so you need to approach it honestly and well-prepared.

It is my intention in my little talk today to motivate you to find out more about the futures, and futures studies, so that you can make an even more positive difference in

the lives of children, families, and future generations in every way and in every place you can.

So, What is Futures Studies?

Futures Studies is generally misunderstood from two perspectives. On the one hand, there are those who believe futures studies is, or that it pretends to be, a predictive science which, if properly applied, can foretell accurately what THE future WILL BE.

There is no such futures studies worthy of your attention. Nothing in society--certainly nothing that can be said about children, families and those who serve children and families--beyond the most trivial can be precisely predicted. Whatever might have been thought to be the case through the 19th and early 20th Centuries, we should all know by now that society is not some gigantic machine, the future states of which, if its inner workings are properly understood and its operations carefully calculated, can be precisely pre-determined.

So I have no intention at all today of telling you what "the future" of children and families will be. Neither I, nor you, nor any other person can do that with any reasonable accuracy whatsoever.

On the other hand, it is not the case that it is hopeless to try to anticipate things to come. And it is certainly not the case that anyone's guess is as good as anyone else's. Even though "the future" cannot be predicted (and certainly no prediction of the future should ever be uncritically "believed", no matter how eminent the source), there are theories and methods which futurists have developed, tested, and applied that have proven to be useful, and exciting. So I hope to tell you something useful about the futures, even though I am not trying to tell you things that are true in the sense of accurate predictions of things to come.

Understanding and applying the theories and methods of futures studies enables individuals and groups to anticipate the futures more usefully, and to shape it appreciably more to their own preferences.

I consult with many groups. Over the years I have worked especially with people in governments, education, and the space community. But it has turned out that the people who are best able to take the futures seriously are judges and magistrates. This is something I did not originally expect when I began futures studies. I assumed that judges were conservative and backward-looking. While many judges ARE conservative and backward-looking indeed, these very same judges often are also often futures-oriented. They find they have to be futures-oriented because they are constantly being asked to settle disputes--often over new technologies or lifestyles--that have not yet been brought to the legislature for public policymaking. Indeed, judges are often asked to settle disputes concerning matters about which the average citizen is totally unaware. It is their job to do so.

So, judges, and eventually lawyers, and then people who work a lot with judges and lawyers, have been forced to become applied futurists, and hence to learn about and

use the theories and methods of futures studies in their strategic planning and then in their day-to-day decision-making.

It was my work over the past thirty years with judiciaries all around the world that has led to my being a presenter before you today.

Over the many years that I have been teaching futures studies and doing futures research and consulting, I have come to understand that there are three basic things to understand about the futures, and hence about futures studies. I have, somewhat jokingly, framed them as "Dator's Laws of the Future." They, and a few of their corollaries, are stated here in capsule form:

I. *"The future" cannot be "predicted" because "the future" does not exist.*

As I have already tried to make clear, futures studies does not--or should not pretend to--"predict the future." Rather, futures studies identifies and analyzes ideas about the futures--what I usually call "images of the futures"--which each individual (and group) has--often holding several conflicting images at one time. These images of the futures often serve as the basis for actions in the present. Some individual and group images of the futures are highly static, persisting for generations. Others are highly volatile, changing according to changing events or perceptions. Some images change over one's lifespan. Different groups often have very differing images of the future. Men's images often differ from women's. Western images differ from nonwestern images, and so on.

Now, there are three corollaries to Dator's First Law.

The first corollary states:

IA. *"The future" cannot be "predicted," but "alternative futures" can, and should be "forecast."*

Thus, one of the main tasks of futures studies is to identify and examine the major alternative futures which exist at any given time and place. This is often a major contribution of futures studies to strategic planning--to broaden the horizon of the futures so that the plan embraces much wider and farther out concerns than might otherwise be considered.

A second corollary of Dator's first law states:

IB. *"The future" cannot be "predicted," but "preferred futures" can and should be envisioned, invented, implemented, continuously evaluated, revised, and re-envisioned.*

Thus the major task of futures studies is to facilitate individuals and groups in formulating, implementing, and re-envisioning their preferred futures; not to predict the future, but to envision and strive to realize preferred futures.

And the third and final corollary to Dator's First Law states that

1C. *To be useful, futures studies needs to precede, and then be linked to, strategic planning, and thence to administration.*

The identification of the major alternative futures and the envisioning and creation of preferred futures then guides subsequent strategic planning activities, which in turn determine day-to-day decision-making by an organization's administrators.

Moreover, the process of alternative futures forecasting and preferred futures envisioning is continuously ongoing and changing. The purpose of any futures exercise is to create a guiding vision, not a "final solution" or a limiting blueprint. It is proper, especially in an environment of rapid technological, and hence social and environmental, change for visions of the futures to change as new opportunities and problems present themselves.

So that is Dator's First Law about the futures: that THE future cannot be predicted, but alternative futures can be forecast, and preferred futures envisioned and realized through participative, futures-oriented strategic planning, and futures-informed day-to-day decisions and actions.

Dator's Second Law of the futures is:

II. Any useful idea about the futures should appear to be ridiculous.

This is the hardest part of futures studies for most people to accept and embrace. But it is absolutely essential.

IIA. Because new technologies permit new behaviors and values, challenging old beliefs and values which are based on prior technologies, much that will be characteristic of the futures is initially novel and challenging. So useful ideas about the futures typically seem at first obscene, impossible, stupid, "science fiction", ridiculous. And then, as more and more people experience the new behavior and embrace the new values, the once ridiculous idea becomes familiar, and eventually utterly commonplace.

IIB. But, because most people don't understand or can't accept Dator's Second law, they cling to the idea that useful information about the futures should be easily understood and acceptable. Thus many people--sometimes even professional planners--often use the phrase "the most likely future" or "the least likely future", as though there were such things. Usually, what most people see as the "most likely futures" never happens at all while "unlikely futures" abound in reality. So please do not use, or even think in terms of, "most likely" or "least likely" futures. These are misleading and not useful concepts.

IIC. If "any useful idea about the futures should appear to be ridiculous," then--if futurists intend to be useful--they should expect to be ridiculed and to have their ideas initially rejected. This is one reason it is difficult to be a good futurist. People don't want to be ridiculed and laughed at. They want to be lauded and applauded. And so they say things that will win them applause--things that are in accordance with what the boss believes about the future, rather than what futures research suggests might be more useful for the boss to consider.

Now of course, some of the ideas of futurists may well deserve ridicule and rejection, but nonetheless, even their useful ideas about the futures are likely to be ridiculed. So

ridicule and derision are good indicators of useful ideas about the future: anything you dismiss as "impossible" is the very thing you need to think about more carefully.

IID. Thus, decision-makers, and the general public, if they wish useful information about the futures, should expect it to be unconventional and often shocking, offensive, and seemingly ridiculous. Futurists, however, have the additional burden of making their initially-ridiculous ideas plausible and actionable by marshaling appropriate evidence and weaving alternative scenarios of their possible developments.

Trends.

The problem is this: most people seem to view the future as a linear continuation of whatever is happening today. If times are good now, they will be good in the future, and no one can convince them otherwise. The Dow will rise forever, so invest heavily, retire early, and live in idle luxury for the rest of your life. So many people believed without question only a few years ago.

On the other hand, if we are experiencing a recession, then it is impossible for many people to imagine good times ever returning again. If crime is rampant now, it will be rampant forever. And so on.

Trends continue, most people seem to believe, and therefore, when they begin seriously planning for the future, they look for trends, project them out a few years, and make their plans accordingly. This is not something just ordinary people do. Most strategic planners seem fixated on planning for continuing trends as well.

But in fact, trends seldom continue, and trends certainly don't continue forever. They are often interrupted by other factors. Some of these are totally unexpected events. Some are other trends that have either been unnoticed, or unrelated to existing trends. But the most important things that interrupt trends are what futurists call "emerging issues."

Emerging Issues.

Everything that exists now once did not exist. Everything that exists now went through a life-cycle of birth, slow emergence, rapid growth to maturity and stagnation, and eventual death, or at least substantial decline until it goes through the cycle again.

The term, "emerging issues" is used to describe things in their very earliest appearance, when they are still hidden from the view of most people, and are observable only in strange and often forbidden places, shared by marginal if not crazy people and groups, thoroughly discredited by the powers that temporarily be.

It is the duty of futurists to try to identify emerging issues. And they do so by looking in places, and talking with people, that respectable members of society don't like to look into or talk with.

That is why any useful idea about the futures should appear to be ridiculous--because useful ideas are usually found in the dark, dangerous, and dank cracks and crevices of society, not out in the bright light of day where respectable people like to live. But if

the futurist can present a plausible scenario of how the emerging issue might evolve into a trend, and then into a problem/opportunity, she will have done her duty of transforming the ridiculous idea into a useful resource.

Scanning.

The method futurists use for finding emerging issues is called "environmental scanning" or sometimes just "scanning." It is a specific technique that needs to be taught, learned, and practiced. "Scanning" is different from the way most people have been taught to look at the world. It can be taught, but some people find it easier to do than others.

One of the things that futurists scan for is the emergence of new technologies, and the diffusion of existing technologies to places where they are presently nonexistent.

Which leads to Dator's Third Law of the futures which is a quotation from the Canadian futurist and philosopher of media, Marshall McLuhan who said:

III. "We shape our tools and thereafter our tools shape us."

Understanding this statement provides the starting point of a useful theory of social change. I have come to understand that technological change is the basis of most social and environmental change. Understanding how this works, in specific social contexts, is the key to understanding what can be understood of the varieties of alternative futures before us, and of our options and limitations for our preferred futures.

Though technology is the basis of social and environmental change, once certain values, processes, and institutions have been enabled by technologies, they begin to have a life of their own. Population size and distribution, global warming and climate change, economic theories and behaviors, cultural beliefs and practices, political structures and decisions, and individual choices and actions all play significant roles in creating futures. Futurists need to monitor the emergence and evolution not only of technologies, but of these other factors as well.

However, our freedom of action in relation to these other factors is best captured by the metaphor, "surfing the tsunamis of change." That is, while we should strive to envision and create preferred futures, we are not free to do just anything we like in the futures. Elements of many alternative futures are rushing towards us like mighty waves of change, and our best option is to strive to surf these tsunamis with fun, excitement, and terror.

So, with that as a very brief overview of what futures studies and is not, let's turn our attention to some of the tsunamis sweeping towards children and families, and people who work with children and families.

Past and present of families and children.

I am certain you know many of the facts and figures far better than I:

In spite of all the rhetoric that neoliberal global capitalism will raise all boats, more than 40% of the people living in South Asia and Sub-Saharan Africa today struggle to exist on less than US \$ 1 per day. One third of humanity lives in relative abject poverty. In every city in the world, at every minute of the day, precious lives are lost to hunger and abuse. In even the most advanced cultures, women at best live their lives in the shadow of men. Everywhere, men and women are tortured or killed for the color of their skin, the slant of their eyes, the smell of their breath, the shape of their dress, the fancies of their god.

In May 10, 2002, the United Nations issued a stunning report titled, "A World Fit For Children." Here are some excerpts from it:

Eleven years ago, at the World Summit for Children [in 1990], world leaders made a joint commitment and issued an urgent, universal appeal to give every child a better future.

Since then, much progress has been made. Millions of young lives have been saved, more children than ever are in school, more children are actively involved in decisions concerning their lives, and important treaties have been concluded to protect children. However, these achievements and gains have been uneven, and many obstacles remain, particularly in developing countries. A brighter future for all has proved elusive, and overall gains have fallen short of national obligations and international commitments.

The Heads of State and Government [at the UN then stated] we reaffirm our obligation to take action to promote and protect the rights of each child. We are determined to respect the dignity and to secure the well-being of all children.

We stress our commitment to create a world fit for children in which sustainable human development, taking into account the best interests of the child, is founded on principles of democracy, equality, non-discrimination, peace and social justice, and the universality, indivisibility, interdependence, and interrelatedness of all human rights, including the right to development.

We recognize and support parents and families or, as the case may be, legal guardians as the primary caretakers of children, and we will strengthen their capacity to provide the optimum care, nurturing and protection.

We hereby call on all members of society to join us in a global movement that will help build a world fit for children through upholding our commitments to the following principles and objectives:

1. *Put children first.*
2. *Eradicate poverty: invest in children.*
3. *Leave no child behind.*
4. *Care for every child.*
5. *Educate every child.*
6. *Protect children from harm and exploitation.*
7. *Protect children from war.*
8. *Combat HIV/AIDS.*

9. *Listen to children and ensure their participation.*
10. *Protect the Earth for children.*

I need to insert a comment here about that last goal--"Protect the Earth for children". I must admit that this is one point where I believe the report is far, far too conservative. There is very little left of the Earth to protect. The magnitude of our environmental challenges requires something much more dramatic than mere "protection." It is far too late for that.

Humans were once a tiny part of nature, no more consequential than any of the other fauna of Earth and substantially less numerous or powerful than most. However, over the millennia, and especially over the last several hundred years, and most especially the last few decades, humans have become the dominant species on Earth. We have transformed what was once a "natural" environment of which we were only a small part, into a largely and increasingly "artificial" environment of our own creation.

It is of utmost importance that you understand this change in the human position, and our pressing and novel responsibilities for the futures which follow from it, whether we like it, or are ready for it, or not. As Antoine de Saint-Exupery wrote in *The Little Prince*: "People have forgotten this truth, but you must not forget it. You become responsible forever for what you have tamed. You are responsible for your rose." We have tried to tame the Earth, and now we are fully responsible for its futures in ways that probably exceed our intellectual and ethical capacities.

The scientist Peter Vitousek recently explained clearly what it means for humans to be responsible for the massive changes they have wrought on Earth:

All organisms modify their environment, and humans are no exception. As the human population has grown and the power of technology has expanded, the scope and nature of this modification has changed drastically.

The global consequences of human activity are not something to face in the future--they are with us now. All of these changes are ongoing, and in many cases accelerating; many of them were entrained long before their importance was recognized. Moreover, all of these seemingly disparate phenomena trace to a single cause--the growing scale of human enterprise. The rates, scales, kinds, and combinations of changes occurring now are fundamentally different from those at any other time in history; we are changing Earth more rapidly than we are understanding it. We live on a human-dominated planet--and the momentum of human population growth, together with the imperative of further economic development in most of the world, ensures that our dominance will increase."

In a very real sense, the world is in our hands--and how we handle it will determine its composition and dynamics, and our fate.

[Excerpts from Peter Vitousek, et al., "Human domination of Earth's ecosystem," *Science*, 25 July 1997, pp. 494ff.]

If we continue to ignore the facts of global climate change (with all that means for changes in human health and welfare), water pollution and scarcity, the impending end of oil as a cheap energy source with no satisfactory alternative in sight,

overfishing and ocean contamination, and a myriad other environmental challenges, we are irresponsibly passing on to future children and families catastrophes of our own making. This is one of our gravest unmet responsibilities we owe future children and families.

This responsibility needs to be more forcefully stated than the UN leaders were able to do, especially since the United States leads the world in flaunting and ridiculing these very real challenges and opportunities.

So now I return to the conclusion of the UN statement on a "World Fit For Children":

We recognize that the implementation of the present Declaration and Plan of Action require not only renewed political will, but also the mobilization and allocation of additional resources at both the national and international levels, taking into account the urgency and gravity of the special needs of children.

In line with these principles and objectives, we adopt the Plan of Action, confident that together we will build a world in which all girls and boys can enjoy childhood — a time of play and learning, in which they are loved, respected and cherished, their rights are promoted and protected, without discrimination of any kind, where their safety and well-being are paramount and where they can develop in health, peace and dignity.

These are tremendously inspiring words. I am sure some of you had a hand in crafting them, and I congratulate you for that. And yet in the "review of progress and lessons learned" that followed these bold statements of intent we learn how little real progress we have actually made since similar commitments were made in 1990, and how daunting the task is ahead.

The 2002 report says:

The resources that were promised at the Summit [in 1990] at both the national and international levels have yet to fully materialize. Critical challenges remain: more than 10 million children die each year although most of those deaths could be prevented; 100 million children are still out of school, 60 per cent of them girls; 150 million children suffer from malnutrition; and HIV/AIDS is spreading with catastrophic speed. There is persistent poverty, exclusion and discrimination, and inadequate investment in social services. Also, debt burdens, excessive military spending, inconsistent with national security requirements, armed conflict, foreign occupation, hostage-taking and all forms of terrorism, as well as the lack of efficient use of resources, among other factors, can constrain national efforts to combat poverty and to ensure the well-being of children. The childhood of millions continues to be devastated by hazardous and exploitative labour; the sale and trafficking of children, including adolescents, and other forms of abuse, neglect, exploitation and violence.

The experience of the past decade has confirmed that the needs and rights of children must be a priority in all development efforts. There are many key lessons: change is possible — and children's rights are an effective rallying point; policies must address both the immediate factors affecting or excluding groups of children and the wider

and deeper causes of inadequate protection and rights violations; targeted interventions that achieve rapid successes need to be pursued, with due attention to sustainability and participatory processes; and efforts should build on children's own resilience and strength. Multisectoral programmes focusing on early childhood and support to families, especially in high-risk conditions, merit special support because they provide lasting benefits for child growth, development and protection.

[From the "Report of the Ad Hoc Committee of the Whole of the twenty-seventh special session of the General Assembly" of the United Nations, meeting in New York City, May 10, 2002. (A-S27-19-Rev1E.doc)].

Reading and reflecting on statements like these could easily lead one to conclude that the world of children and families is getting worse and worse. It is tempting to conclude that the condition of children was much better in some golden past, and that things are deteriorating rapidly.

In some ways, some things clearly are getting worse, but I would like you to consider for a moment an argument that--no matter how bad things are now for far too many children--in fact there have been major improvements in the lives of many other children, and that these improvements could spread worldwide for all children everywhere.

Indeed, you--you in your daily work and as a member of the International Association of Youth and Family Judges and Magistrates, and many other organizations like it devoted to improving the lives of children and families--represent a profound change over the last several decades in attitudes and policies about families and child care. There is every reason for me to be optimistic about the futures of families and children because of you, and what you represent more broadly. You are a major force for good in this world. You are the hope of the futures.

The History and Futures of Families.

I am sure many of you are familiar with the work of Lloyd deMause, especially his monumental groundbreaking book of some years ago titled, *A History of Childhood*.

The book opens with the following startling statement:

The history of childhood is a nightmare from which we have only recently begun to awaken. The further back in history one goes, the lower the level of child care, and the more likely children are to be killed, abandoned, beaten, terrorized, and sexually abused.

*That this pattern has not previously been noticed by historians is because serious history has long been considered a record of public not private events. Historians have concentrated so much on the noisy sandbox of history, with its fantastic castles and magnificent battles, that they have generally ignored what is going on in the homes around the playground. And where historians usually look to the sandbox battles of yesterday for the causes of those today, we instead ask how each generation of parents and children creates those issues which are later acted out in the arena of public life. [Lloyd deMause (ed), *The History of Childhood*. New York: Psychohistory Press, 1974. Chapter One by Lloyd deMause, p.1.]*

"...how each generation of parents and children creates those issues which are later acted out in the arena of public life." That is the point! That is why you, and your work with children and families, is so important.

The rest of the chapter--and the book--is a horrifying record of completely-acceptable childrearing practices from antiquity to modern times that well substantiate his claim that childhood was indeed a nightmare for even the most "normal" child--a nightmare that scarred lives forever, and led parents to inflict the same tortures they experienced on their own children, and, more importantly, to act out their anger and anxieties as adults by murdering and killing other humans, often in the name of religious beliefs or nationalistic fervor.

Even though deMause offers some evidence that humanity has improved somewhat over the last century, there is good reason to believe that childhood traumas still are the root reason behind many of the actions of national leaders today, including the leaders of United States [Lloyd deMause and Henry Ebel, *Jimmy Carter and America's Fantasy*. New York: Two Continents, 1977; Lloyd deMause, *Reagan's America*. New York: Creative Roots, 1984; Lloyd deMause, *The Emotional Life of Nations*. New York: Karnac, 2002].

Here are some other quotations from deMause's *The History of Childhood*:

Infanticide.

The history of infanticide in the West has yet to be written.... But enough is already known to establish that ... infanticide of both legitimate and illegitimate children was a regular practice of antiquity,... (25)

Children were thrown into rivers, flung into dung-heaps and cess trenches, "potted" in jars to starve to death and exposed on hills and roadsides, "a prey for birds, food for wild beasts to rend" [as Euripides described it]. (25)

As late as 1527, one priest admitted that "the latrines resound with the cries of children who have been plunged into them." (29)

Even though Thomas Coram opened his Foundling Hospital in 1741 because he couldn't bear to see the dying babies lying in the gutters and rotting on the dung-heaps of London, by the 1890s [--barely one hundred years ago in the capital of Western civilization--] dead babies were still a common sight in London streets." (29)

Institutional Abandonment.

[U]p to about the 18th century, the average child of wealthy parents spent his earliest years in the home of a wet-nurse, returned home to the care of other servants, and was sent out to service, apprenticeship, or school by age seven, so that the amount of time parents of means actually spent raising their children was minimal. The effects of these and other institutionalized abandonments by parents on the child have rarely been discussed. (32)

The most extreme and oldest form of abandonment is the outright sale of children. Child sale was legal in Babylonian times and may have been quite common among many nations in antiquity. (32)

Another abandonment practice was the use of children as political hostages and security for debts. (33)

However, it was the sending of children to wet-nurse which was the form of institutionalized abandonment most prevalent in the past. (34)

Contrary to the assumptions of most historians, the custom of not breast-feeding infants at all reaches back in many areas of Europe at least as far as the fifteenth century. [Breast-feeding was described as being "swinish and filthy"; a "disgusting habit"]. (34)

Battering Children.

The evidence I have collected on methods of disciplining children leads me to believe that a very large percentage of the children born prior to the 18th century were what would today be termed "battered children." (40)

Beating instruments included whips of all kinds, including the cat-o'-nine-tails, shovels, canes, iron and wooden rods, bundles of sticks and special school instruments like the flapper which had a pear-shaped end and a round hole to raise blisters. ... The beating described in the sources were generally severe, involving bruising and bloodying of the body, began early and were a regular part of the child's life. (41)

Century after century of battered children grew up and in turn battered their own children. (41)

Even royalty was not exempt for battering, as the childhood of Louis XIII confirms. A whip was at his father's side table, and as early as 17 months of age, the dauphin knew enough not to cry when threatened with whip. At 25 months, regular whippings began. He had frequent nightmares about his whippings, which were administered in the morning when he awakened. When he was king he still awoke at night in terror, in expectation of his morning whipping. The day of his coronation, when he was eight, he was whipped. (41)

As beatings began to decrease, substitutes had to be found. For instance, shutting children up in the dark became quite popular in the 18th and 19th centuries. ... Children were sometimes left locked in rooms for days. (43)

Sexual abuse.

The history of sex in childhood presents even more difficulty than usual in getting the facts.... (43)

The child in antiquity lived his earliest years in an atmosphere of sexual abuse. Growing up in Greece and Rome often included being used sexually by older men.

Boy brothels flourished in every city, and one could even contract for the use of a rent-a-boy service in Athens. Even where homosexuality with free boys was discouraged by law, men kept slave boys to abuse so that even free-born children saw their fathers sleeping with boys. (43)

Sexual abuse by teachers of smaller children may have been common throughout antiquity. (44)

The campaign against the sexual use of children continued through the 17th century, but in the 18th century it took an entirely new twist: punishing the little boy or girl for touching its own genitals. That this, like early toilet-training, was [a recent development] is suggested by the fact that prohibitions against childhood masturbation are found in none of the primitive societies.... The attitude of most people toward childhood masturbation prior to the 18th century can be seen in Fallopius's counsel for parents to "be zealous in infancy to enlarge the penis of the boy." (48)

But it was not until the beginning of the 18th century, as a climax of the effort to bring child abuse under control, that parents began severely punishing their children for masturbation, and doctors began to spread the myth that it would cause insanity, epilepsy, blindness, and death. By the 19th century, this campaign reached an unbelievable frenzy. Doctors and parents sometimes appeared before the child armed with knives and scissors, threatening to cut off the child's genitals....(48)

When one learns that as late as 1900 there were still people who believed venereal disease could be cured "by means of sexual intercourse with children," one begins to recognize the dimensions of the problem more fully. (49)

Swaddling.

[The convenience of swaddling] to adults was enormous--they rarely had to pay any attention to infants once they were tied up. Swaddled infants are extremely passive, their hearts slow down, they cry less and they sleep far more. ... Children were described as being laid for hours behind the hot oven, hung on pegs on the wall, placed in tubs, and in general "left like a parcel in every convenient corner." (37)

Throwing the swaddled child about was sometimes practiced. A brother of Henri IV, while being passed for amusement from one window to another, was dropped and killed. ... Doctors complained of parents who break the bones of their children in the "customary" tossing of infants. (31)

The English led the way in ending swaddling, as they did in ending outside wet-nursing. Swaddling in England and America was on its way out by the end of the 18th century, and in France and Germany by the 19th century (38)

Once in the infant was released from its swaddling bands, physical restraints of all kinds continued. ... Right into the 20th century, leading strings were tied to the child's clothes to control it and swing it about. (38)

All of this is not to say that parents didn't love their children in the past, for they did. Even contemporary child-beaters are not sadists; they love their children, at times, and in their own way, and are sometimes capable of expressing tender feelings, particularly when the children are non-demanding. The same was true for the parent in the past; expressions of tenderness toward children occur most often when the child is non-demanding, especially when the child is either asleep or dead. (17)

Of course it is not love which the parent of the past lacked, but rather the emotional maturity needed to see the child as a person separate from himself. (17)

Well, there is more, but this is all extremely dreary stuff. I apologize for inflicting it on you. But the point is that deMause is convinced that, no matter how bad the lives of many children are now, there has been overall progress, so that once tolerated, if not encouraged, practices are now outlawed. It is your wonderful opportunity, and duty, to help see that the lives of all children in the futures be even better than your own, or than even your own children.

Taking very seriously our obligations to see that the goals in the 2002 UN resolution on a "World Fit for Children" are achieved over the coming decades is absolutely essential, and no point is more important than point nine that states:

Children and adolescents are resourceful citizens capable of helping to build a better future for all. We must respect their right to express themselves and to participate in all matters affecting them, in accordance with their age and maturity.

This goal is also a hallmark of deMause's conclusions. DeMause says that there have been six eras of child care throughout history. We have only recently moved into the sixth era, which he calls the "helping mode". He describes it in words which John Rosemond and any of his disciples in the audience will certainly deplore and ridicule, but which I admire:

The helping mode involves the proposition that the child knows better than the parent what it needs at each stage of its life, and fully involves both parents in the child's life as they work to empathize with and fulfill its expanding and particular needs. There is no attempt at all to discipline or form 'habits'. Children are neither struck nor scolded, and are apologized to if yelled at under stress. This helping mode involves an enormous amount of time, energy and discussion on the part of both parents, especially in the first six years, for helping a child reach its daily goals means continually responding to it, playing with it, tolerating its regressions, being its servant rather than the other way around, interpreting its emotional conflicts, and providing the objects specific to its evolving interests. Few parents have yet consistently attempted this kind of child care (p. 52f).

I fully agree. Do you?

Well, remember that any useful idea about the futures should appear to be ridiculous!

But now let me direct your attention to something completely different.

New Families of Robots, Cyborgs and Artificial Intelligence.

Over the last thirty years, scientists and then technicians, and finally entrepreneurs have discovered, developed, advertised, and sold technologies which are literally transforming our world into something almost unimaginable.

The first of these transforming technologies derives from scientists' identification of the various fundamental particles of nature, and then from technicians' ability to manipulate one of them, namely the electron. The result is electronics and the electronic revolution brought about by a flood of communication devices, the most powerful of which currently is the globally-linked Internet.

I am certain every person in this room is familiar with the computer and Internet. I am sure you all have email accounts and that many of you probably wish you were checking your messages now--in fact, I suspect some of you are using wireless PDAs to check your email now while I am talking. We can't live without our email. I know I can't.

But I am equally certain that most of you would not own a personal computer 10 years ago, and even fewer would have ever gone online 20 years ago. Indeed, if most of you had been told 20 years ago that you would be living in the information-rich, communication-flooded global electronic environment of the present, you would have said it was ridiculous. But I would have suggested that 30 years ago, because I was involved in some very early experiments then that I felt very clearly would lead to the world most of us live in today.

And as that technology which is being used by more and more people of the world becomes used by almost all people in the world everywhere, the world will change.

It will change from a world based upon geographical and physical place, information scarcity and control, and the necessity of travelling from place to place in order to access information, to a world in which the scarcity of time replaces the tyranny of place.

Many of us already live in the new "24/7" world where we are always at work and never really ever on vacation; where we awaken in the middle of the night to communicate with colleagues on the other side of the world, and then have to take what we hope will be a "power nap" at noon to enable us to communicate with colleagues in the room next door.

The old agricultural and industrial worlds are over for some of us, and are very likely to be fundamentally redefined, if not also over, for almost all of the rest of humanity by the midpoint of the 21st Century.

It is said that today, half of humanity has never made a phone call, and 90 percent have never used a computer. Those figures could persist into the future. Or they could change substantially as the technology becomes smaller, more powerful, cheaper, more ubiquitous and invisible.

One of the more startling and more recent consequences of the electronic revolution is the rapid emergence of robotics and artificial intelligence.

Now, some of us have been awaiting the arrival of true artificial intelligence for many years. Like the futures itself, HAL, the talking computer of the old science fiction book and movie, *2001, A Space Odyssey*, seems always lying ahead.

But in fact, there have been amazing developments in artificial intelligence over the last half-century, and especially the last decade. Almost all businesses--certainly all complex, globe-expanding human enterprises--would be totally impossible now were it not for the fact that they rely on machines to make decisions that humans could not possibly make as quickly and as accurately as machines do.

I only call your attention to the tragic results a few months ago when the pilots in an airplane flying over Switzerland ignored the warnings of their onboard computer to rise, and followed the orders of a tired, harried human ground controller to descend--and crashed into a plane full of Russian children killing everyone.

All of us are gathered here today because of our willingness to rely on millions of decisions that were not made by any human but which proved to be the right decisions to make. We live today very much at the tender mercy of many decisions made more wisely and quickly by artificial intelligence than any human could.

And there will be many more in the future. Indeed, just as automation has vastly reduced the number of jobs for people who work with their brawn, so also it is not clear to me that there is much of a future for people who work primarily with their brains, if what they do with their brains is to make routine decisions that a computer can make faster and more reliably. And that describes what a lot of what bureaucrats, lawyers, judges, librarians, and teachers do--repetitive, mind-numbing, grunt-thinking.

Let the computers do the manual labor as well as the routine decisionmaking, and let humans be free to play, pray, and care.

But even a lot of caretaking is already being done better by robots and artificial intelligence than it is by humans. And more will be in the futures.

This is a development of extreme importance for those of us who deal with children and families. The emergence of autonomous, mobile intelligence may impact hospitals, care homes, playgrounds--and courts and laws--in ways you might think impossible. In fact they are already impacting families and children in ways you think impossible, so quickly are developments in robotics and artificial intelligence moving forward.

Some of my colleagues and I have been working on the emerging rights of robots for almost twenty years now, and some lawyers recently have taken up the concern seriously in their work on a "jurisprudence for artifacts" as well.

In short, children, families, and those who serve children and families, may very well experience substantially more diversity, more controversy, more emotional

attachment, and more conflict in the futures because of the co-existence of humans with many varieties of autonomous artificial intelligences.

What DO you say when your daughter wants to marry a robot--or her own clone?

Biotech and Biological Families.

Because, of course, it is not only the electronic information society that is being created by new and emerging technologies. There is also the world of biologically-modified and augmented humans that is racing towards us as well.

The most powerful technologies of the 21st Century may well be those related to biological engineering. Whatever coal and iron did for the 19th Century, and oil and the electron did for the 20th, genes and their related proteins, enzymes, sugars, and other chemicals may do for the 21st--and much, much more.

It has been said that we presently live in an "information age." Maybe so, but the ultimate information, dealing with the structure and processes of life itself, is being better and better understood daily. Old forms of life are being modified, and new forms of life are being hatched. We are only beginning to enter the True Information Age of biological engineering.

Even though some people and groups may be opposed to biological engineering--and there are many and often very good reasons for concern--trying to stop biological engineering is more like trying to stop abortions or recreational drug use than it is like trying to stop nuclear generating plants.

Much biological engineering is comparatively easy to do "in your kitchen", and some of it is driven by a desire to "correct" a behavioral "defect" in one's self, or one's child, and then perhaps to "improve" the performance of one's self, or one's child. It is very private, very emotional, extraordinarily powerful.

A finding of potential interest to everyone in this audience recently suggested an answer to why some people who are seriously abused as children grow into apparently normal nonabusing adults, while others become even more serious abusers themselves. A long-term study in New Zealand indicates that a genetic variation associated with high concentrations of certain brain chemicals protects abused children from becoming violent and impulsive later in life. There is hope that this information may be used to reduce the propensity to child abuse among adults with a history of violence ["Resilient DNA: Gene May Brighten Future For Abused Kids," *Science News*, August 3, 2002].

At the same time, many people presently living with so-called "defects" or "disabilities", or who have "disabled" children, are very much opposed to using biological engineering to "correct" these attributes, while other parents and children welcome the possibility of eliminating these features, and perhaps even of augmenting or improving their behavior beyond what is currently considered to be "normal" as well.

These technologies are certainly subject to misuse, and they will be misused. But they will be used, somewhere, by someone in the world. While progress here can be slowed and influenced, and perhaps it should be, it cannot be stopped.

Moreover, biological processes will be manipulated in essentially all living organisms--from humans, to other animals, to plants grown for food, to all plants everywhere in the world and under the seas.

Controlling biological processes controls a lot of the behavior of an organism. Not all of the behavior, to be sure. The role of the environment in shaping each individual organism, and species, is great. Clearly the interaction between environment and biology is the key to any specific future state of any organism. Indeed, the more scientists learn about genetics and other life processes, the more complicated biological engineering seems to become--at first. But controlling genes and their related processes clearly gives humans much more power over the future of organisms than does just controlling the environment alone.

Nanotechnologies.

In 1987, Eric Drexler wrote a book that turned the world on its head, whether the world noticed it then or not. Titled, *Engines of Creation*, it described the potential power of self-replicating machines that could be created on the size of molecules--the smallest physical units of elements and compounds--and then set loose to do whatever they were designed to do, free from further human intervention.

Nanotechnology (technology at the scale of one nanometer--the scale of a molecule, and thus also often called "molecular engineering") has been the subject of considerable research, speculation, and hope (with some fears) since then. After being viewed initially as just another ridiculous fantasy (like any ultimately useful idea about the future, as you well know!) nanotechnology eventually caught the attention of the scientific/engineering establishment, and since the first years of the 21st Century has begun to receive serious funding from such mainstream organizations as the US National Science Foundation.

If the more advanced claims about nanotechnology prove feasible, all bets are off. Since there is no such thing as "waste" (all molecules in anything are raw material to be restructured into something else), the old world of scarcity will be over, as will be the old ways of producing...everything--food, clothing, automobiles, buildings; well, everything. The energy requirements of nanotechnologies also are insignificant compared to those of contemporary industrial technologies. And since humans won't need to pay much attention to the manufacturing processes, it provides even more reasons why we should begin thinking seriously about moving towards a peaceful, prosperous, and meaningful world without work.

Four Information Societies in One.

What is actually happening, I believe, is the merger of four information societies into one--the 4 billion year-old biological information society; the 10 thousand year-old

cultural information society; the three thousand year-old civilizational society, and the 250 year-old industrial information society, all are merging in the 21st Century into one new "coming information society."

Prof. Susantha Goonatilake of Sri Lanka uses the metaphor of "a-hand-in-a-glove" to describe the relationship of these four information societies. For millennia, he says, human biology limited what cultures could do, and cultures tried to limit what technologies could do. But technologies always changed faster than cultures changed, and cultures changed faster than human biology which did not change at all. Until very recently, all humans were essentially the same genetically as they were when *homo sapiens* first established itself as a separate species some tens of thousand years ago.

But now this long-established relationship between biology, cultures, and technologies itself is changing. Once biological engineering becomes commonplace, biological change will be as rapid as any other kind of technological change.

But what about culture? Can "culture" change quickly and appropriately enough to keep up with genetic and environmental change? Since families are major carriers of, and are encapsulated by, culture, this is a very serious question for you to consider. It seems highly unlikely to me that existing human cultures can change quickly enough to adjust to changes in genetics and the environment, and that is the root cause of my concern about the futures of families and children.

America's irrational killing response to 9/11, and the eagerness of its citizens to give up rights and privileges long held to be sacred and eternal, clearly shows that even an arguably "advanced" postmodern nation reverts to primal brutality when unexpectedly attacked.

With the evolution of artificial intelligence and artificial life, humans will no longer be the only part of nature thinking back, and acting back, on itself. Indeed, I believe that we humans emerged to come to this point: humans are just the first hint--a tepid foretaste--of self-conscious nature. It has been humanity's destiny, our duty, to produce more appropriately self-conscious entities, and through the biological and electronic revolution, we are beginning to do so. As Manuel Delanda said, we humans "might just be insects pollinating machines that do not happen to have their own reproductive organs right now." But soon they may.

And then what? When our robotic and cyborganic offspring rule, what will be the place of human families and children? Will we retire from the scene? Become pets for robots? Or zoom off into outer space where no humans have ever gone before, but certainly "going" in the company of families of robots, cyborgs, and post-homo sapiens?

Conclusion.

There are many exciting futures awaiting you to envision and create, and I hope my little talk today will encourage you to surf these and other tsunamis of change!

I'll end by reading a poem called *Exile*, and written by Mbella Sonne Dipoko, from the Cameroons in Africa:

In silence
The overloaded canoe leaves our shores

But who are these soldiers in camouflage,
These clouds going to rain in foreign lands?

The night is losing its treasures
The future seems a myth
Warped on a loom worked by lazy hands.

But perhaps all is not without some good for us
As from the door of a shack a thousand miles away

The scaly hand of a child takes in greeting
The long and skinny fingers of the rain.

[In Ronald Segal, ed., *Modern Poetry from Africa*. Penguin Books, 1968, p. 164]