

Governmental Foresight: Of course!

Introduction to a book on Governmental Foresight
by the Korean Institute of Public Administration
July 2009

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A proverbial "man from Mars" would be astounded to discover that it is necessary to argue that governments should systematically exercise foresight as an essential part of their work. "How is it possible to make policy for this fast-moving world", he might say, "unless you have first prudently determined what the world ahead might be like? If policy is made without rigorously looking ahead, then it is being made on the basis of past (or current) conditions that may or may not be dominant in the future," he would warn. "Surely governments make policy for the future and not the past, so of course they must look ahead with rigor and persistence!"

The man from Mars would think we humans are nutty to even have to discuss the issue of governmental foresight, it would be so obvious to him.

And therein lies the problem.

Steady structures for stable times.

All governments, even those created very recently, are based on cosmologies, principles, and technologies more than two hundred years old. Of all the institutions in the world today, none is more out-of-date than government. Business corporations (and the instrumentalities they use) are almost nothing like they were 100, much less 200, years ago. The same goes even for the family, or religion. They and all other institutions have mightily changed while governments remain structurally and cosmologically stuck in a world that has long faded away.

When the first modern democratic governments were formed in the late 18th century, the best way to look forward was in fact to look backwards. The pace of social and environmental change was, or was perceived to be, very, very slow. If founders based their modern governments--and subsequent policies--on the philosophies, cosmologies, and technologies of the past, they would be serving posterity as well as they possibly could be served.

The foundational ideas, and the basic structural framework, of all modern governments--including that of Korea--developed in western Europe and North America when those areas were still largely agricultural. The industrial revolution was barely underway, and it would be several generations (not until the second half of the 19th century) before true industrial societies would emerge.

New technologies that were invented about the same time modern representative governments were invented include the sextant, the steam engine, the cotton gin, smallpox vaccination--and the guillotine. No one knew anything at the time about atoms, or the laws of thermodynamics, or how to generate electricity. Though the printing press had been invented a few hundred years earlier, it was still a primitive, manually-powered machine.

Philadelphia, where the founders met in 1787-89 to write the Constitution of the United States (all the while complaining of heat, dirt, and congestion), was the second largest city in the US with a population of less than 30,000! New York was only slightly over 30,000 and Boston was not even 20,000 people. The population of America at the time the Constitution was written was about 3,000,000, spread very thinly over the roughly 251,000 hectares of the thirteen original colonies. There was no system of roads or other modes for transportation and communication between the new states of the Union. Indeed, in many ways, the design challenges the writers of the US Constitution faced and overcame were basically problems of communication--how could the few and far-flung citizens of the new nation (which, during the colonial period, had no normal means of intra-communication or transportation), be expected to form a common government for all? Federalism, Bicameralism, the Separation of Powers, the Electoral College, and many other features of the Constitution were all basically solutions to that major challenge--they were new "communication technologies" put in the service of governance, and based on the cosmologies and materials available to the designers at the time.

Among the cosmological perspectives that were then dominant, Issac Newton's mechanistic physical philosophy was the most powerful. All of the Founding Fathers of modern governments everywhere were intellectual children of Newton and of the Enlightenment. Humans were viewed as rational, selfish individuals. Some founders were also influenced by Deism which, like Newton, conceived of the universe as a giant clock, created by a divine clock maker. Once created, this universe--and ourselves in it--proceeded with no further Divine tinkering or interference. Rather, humans were to use their God-given rational intelligence to figure out how they and the clock worked, and to base their laws and judgments on it.

As Harvey Wheeler put it:

[I]f one utilized the proper structural principles in making a constitution it would, almost automatically produce freedom and justice. . . .

The structural foundations for the American Constitution came from the Middle Ages, but its political science came from the age of Newton. The result was a curious combination of the Gothic and the mechanistic [Harvey Wheeler, "Constitutionalism," in Fred Greenstein and Harvey Wheeler, eds., *Handbook of political science*, "Governmental Institutions and Processes", Vol. 5. Reading, Mass: Addison-Wesley, 1975, pp. 75, 77].

Since the pace of life was so slow, new laws were seldom needed and almost never urgently so. Elected officials could be expected to get together once a year, for a few months in the winter when the crops were in and the need for their labor and supervision diminished, to meet in some central place and discuss among themselves the one or two new problems that may have arisen in the past year. Since they were all intelligent

people, learned in the ways of the past, they assumed that, out of their accumulated wisdom, they could frame laws that would solve the problems--and keep them solved forever.

Similarly, only a few people were needed to "administer"--to carry out--the few laws that were passed. And these few laws could easily be administered by people who were like those who made them--brothers and sons-in-law of the politicians who required an easy job for a while. No special expertise was needed.

The world changed after modern governments were invented.

If the French revolution and the revolution for American independence from Britain had been achieved, and the US government formed, just 50 or 60 years later, when industrialization was well underway, there is little doubt that the form, structure, and substance of modern governments would have been quite different. By the mid 19th century, America and the nations of western Europe were rapidly becoming mature industrial powers. Systems of roads, canals and eventually railroads existed. Mechanically-produced newspapers and magazines proliferated, some national in scope. Colleges were no longer only for the training of clergy and some aristocrats, as was the case of all colleges when modern governments were first formed. Universities instead were being created by nations for the purpose of transforming agricultural-era peasants and nobles into industrial-age workers and managers, as well as for developing the technologies that would enable them to become leading industrial and military nations of the world. The laws of thermodynamics were known, as was the existence of atoms. The periodic table of chemistry existed. Faraday discovered electricity. Maxwell explained light, Lyell laid the basis for geology, and Darwin, Wallace, and others had established the principles of evolution.

Technologies that emerged from those scientific discoveries enabled humans to harness power, mold materials, and produce goods that humanity had never seen before. Populations swelled as food production increased (thanks both to new technologies and unusually good weather for two centuries) and improvements in sanitation enabled more people to stay alive longer.

By the middle of the 19th century, the world, led by the West, was now on the road to industrialism, development, and perpetual progress. "Every day in every way, the world is getting better and better," it was believed. Suddenly the West was awash with change. Tomorrow was no longer like today—it was bigger and better. There was more of everything good (and often, for a while, bad), and so the governments that had been intended for a stable agricultural society suddenly found themselves having to manage a world in which novelty increasingly outnumbered continuity. Generations strove to make the lives of their children better than—and thus different from—their own lives. The state removed children from their parents at a tender age and required them to go to schools where they could learn what was needed to thrive in this new world of continued economic growth.

To keep up with the dizzying pace of change, governments began adding new functions and institutions to the old structure as fast as they could. However, strangely enough, no one came up with a fundamentally novel plan for governance after the 1780s. Even Karl Marx and other socialists and communists, who had very different ideas about what governments should do, had little to offer in terms of new forms or theories of governance *per se*. No new ideas have been successfully put forward since then either. Thus we all still are governed by pre-industrial cosmologies within pre-industrial structures.

How American government tried to keep up with change: Independent regulatory agencies

Existing governments certainly have grown grotesquely over the 19th, 20th and 21st centuries, but they have done so by adding appendages onto the old forms as belated responses to pressing new challenges.

It is informative to look at the American case again.

When the US government was first formed in 1790, there were only three executive “departments” (what are normally called “ministries” in other countries) that formed the “cabinet” of the President: the Department of State (*i.e.*, foreign affairs), the Department of War (now called Defense), and the Department of the Treasury. There was also an Office of the Attorney General (eventually the Department of Justice) and an embryonic post office.

That bare-bones arrangement served for sixty years, until 1849 when Congress created a Department of the Interior to deal with matters that were arising in all of the new land the nation was stealing from the native people as the US expanded westward across the continent.

Other cabinet offices, by date, were:

1862, Department of Agriculture (in order to industrialize agriculture)

1870, Department of Justice

1913, Department of Commerce, and also (to balance it) the Department of Labor (These were both very late responses to the fact the US had become an industrial nation)

1953, Department of Health, Education, and Welfare (belatedly recognizing the national government’s responsibility, and not just those of the several states of the Union, in these areas)

1965, Department of Housing and Urban Development (which finally recognized that the US was an increasingly urban nation, and no longer a nation mainly of farmers)

1966, Department of Transportation

1977, Department of Energy (in response to the “oil crisis” of 1974)

1980, Department of Health and Human Services and the Department of Education (making two departments out of the one created in 1953)

1988, Department of Veterans Affairs (which had been a huge “office” before)

2003, Department of Homeland Security (springing from new fears sparked by September 11, 2001)

But Congress, the Courts, and the Presidency and the President's Cabinet offices are not all that there is to US government. Far from it!

After the American Civil War, from 1865 onward, all governmental policies in the US were aimed at promoting and yet regulating the many new industrial and economic activities underway. Rather than re-envision and re-invent a governmental structure fit for the new era, the US simply added what were known as "independent regulatory agencies" (IRAs) to the existing structure.

These agencies were intended to be "independent" of immediate political pressures, and so were staffed by professional bureaucrats who attained job security, and headed by appointed officials whose terms were longer than those of the politicians who appointed them and who were also somewhat difficult to remove for purely political reasons.

The IRAs also combined legislative, executive, and judicial powers in ways that seemed to violate the "separation of powers" doctrine that underlay the US Constitution, but most people realized that the pace of change was so great that the governing assumptions of 1790 simply were inadequate to the needs of 1890.

Thus the US is saddled with two conflicting forms of government. One is the original structure created by the Founding Fathers, enshrined in the US Constitution, and subject to interpretation by the United States Supreme Court. The other is governance by the IRAs from the 1880s onward. They operate more or less independently from the original structure, including from the so-called "Article Three" courts that culminate in the US Supreme Court. These courts have very limited jurisdiction over the IRAs.

In addition, the IRAs were internally conflicted from the very beginning. They were often expected to promote the development of the very activities they were intended to regulate. Promotion generally beat regulation, except when regulation was clearly in the interests of the regulated parties.

The most notable of the early independent regulatory agencies was the Interstate Commerce Commission, created in 1887. The ICC was created in order to find ways to contravene the limitations to national economic development inherent in the Constitution since commerce (and increasingly, all activities) in the US were by this time national and no longer only local or regional.

Other IRAs that were created to do things unanticipated by the Constitution include the Food and Drug Administration, the Federal Trade Commission, the Security and Exchange Commission, the Federal Communication Commission, the Occupational Health and Safety Administration, the Environmental Protection Agency, the Central Intelligence Agency, the United States Agency for International Development, the Selective Service System, the Social Security Administration, the Small Business

Administration, the Federal Reserve System, the General Services Administration, the National Aeronautics and Space Administration, the National Labor Relations Board, the National Science Foundation, the Office of Personnel Management, the US Postal System (demoted from being a cabinet office in 1971), and more.

Look at the names of those agencies! Clearly they do a great deal of governing that is not recognized in the formal US Constitution, and thus provide challenges to anyone who would like to have a sleek, efficient, effective and yet democratic government that can keep up with all of the sleek, efficient, and effective agencies of commerce, religion, communication and the rest that the government should, somehow, govern.

In addition to the expanding independent regulatory agencies, the Executive Office of the President eventually grew to become a huge, powerful, and complex agency of its own. The Office of Management and Budget is just one of the many powerful agencies within the Office of the President. Congress also created governing agencies of its own, most notably the Government Accountability Agency, among others. The federal courts have lagged behind, comparatively, but do have their own administrative appendages as well.

Over the years there were constant waves of governmental reform--sometimes even called "re-inventing government"--which were *ad hoc* responses to specific abuses after the fact, and/or either to weaken government and strengthen private sector control of the economy, or to strengthen government and weaken the private sector, depending on the passions or concerns of the day.

The truly amazing fact about each one of those agencies, however, is that they remain reactive. They were created as responses to pressure, often to clean up after a disaster. None of them was structured to have a systematic and consistent foresight capability. From time to time some of them they may issue "visions of the future", or they may respond to some political vision that is thrust upon them. But there is no agency of government in the US tasked specifically and primarily with "looking ahead" and then reporting what dangers and opportunities they see to other agencies.

Japanese government as another example.

It is instructive to compare the growth of government appendages in the US with the situation in Japan after the Meiji Restoration of 1867. Though having distinctive Germanic (and of course, Japanese) features, the basic governing structure adopted was simply a version of the widespread "parliamentary" variant of the "presidentialist" form of government of the US. Thus, from the outset, the Meiji Constitution of 1889 reflected the fact that the modern governments of both German and Japanese were created after "facilitating industrialization" had come to be the main, if not sole, purpose of all governments, once basic law and order had been established

Thus the original Japanese cabinet ministries from 1885 (the ministries existed before the Constitution did) to the end of World War II were:

Minister President
 Foreign Affairs
 Home (also called Interior)
 Finance
 War
 Navy
 Justice
 Education
 Commerce and Agriculture
 Communications

These ministries are roughly the same as those of the United States at the same time (the 1880s), with the exception that Commerce was included with Agriculture, and Education was seen as a national responsibility from the very beginning in Japan but not in the US. The Japanese Home ministry functioned as an agency of internal security, surveillance and police which was never the case in the US.

This structure was scarcely changed up until the beginning of the Second World War. Separate ministries of Agriculture and Forestry and of Commerce and Industry were created, and a Ministry of Public Welfare established. These additions signaled the increased importance of economic growth as a national policy. There were also bureaus and agencies for control of colonial territories and to encourage economic development for military preparedness.

Even when a new Japanese Constitution was written after the end of the War, there were no drastic structural changes proposed, save of course Article IX which forbade Japan from using war as an instrument of state--an extremely important provision that unfortunately has provoked no imitators among the major nations of the world.

By 1959 the Japanese ministries were:

Prime Minister's office
 (Including the Imperial Household Agency)
 Justice
 Foreign Affairs
 Finance
 Education
 Welfare
 Agriculture and Forestry
 International Trade and Industry
 Transportation
 Post and Telecommunications
 Labor
 Construction
 Local Autonomy

A glance at the new ministries make it clear that the main task of Japanese government now was not just to facilitate economic development, but to make Japan a major player in the rapidly-expanding global economy--which they spectacularly did.

Eventually, in keeping with the global neoliberal ideology of downsizing and outsourcing governmental functions that swept all nations during the 1990s onward, many Japanese ministries and agencies were abolished or merged so that now the Cabinet ministries are:

Internal Affairs and Communications
 Justice
 Foreign Affairs
 Finance
 Education, Culture, Sports, Science and Technology
 Health, Labor and Welfare
 Agriculture, Forestry and Fisheries
 Economy, Trade and Industry
 Land, Infrastructure, Transport and Tourism
 Environment
 Defense

Some of those ministries have lumped together some very strange bedfellows indeed, indicating they are the results of nothing but reorganization for the sake of reorganization. However, the last two named are of special interest. One indicates that Japan, but not the US, considers environmental issues to be of central importance to the nation. The other suggests that Japan is becoming a "normal nation" with the right and ability to use killing force in its national interest.

Nonetheless what is striking is that, in spite of considerable outside pressures from the US and others, Japan has for the most part resisted the temptation to create "independent regulatory agencies" and has instead tasked existing ministries, or created new ones, to encourage and regulate novel economic and other activities as the need arises.

What we do not see in Japan, America, or almost anywhere else if we were to look, is a Ministry of Foresight--or even a small agency devoted primarily to looking ahead.

But why should there be?

There was absolutely no doubt what the future of America, or Japan, or Germany, or Korea or any other nation should be from the mid 1860s onward. The official future towards which every ounce of energy, every penny of money, every brain cell and every muscle was devoted was Continued Economic Growth. The entire purpose of government, education, the media, the family and yes, even religion, and all other modern institutions has been to produce people and processes that will keep the nation and the economy growing, ever and perpetually growing, getting bigger, more prosperous, more developed, world without end.

So why have a Ministry of Foresight when the future is so clearly known? All of the government's attention could be bent on doing whatever is necessary to keep the economy growing. And the way to do that is simply to imitate whatever a successful corporation or nation is doing. If it worked for them, it will work for you. So as new fads and fancy come along, new policies are created and new institutions to carry them out if necessary.

It is not easy. But it is not rocket science, and it does not require any particular foresight--just very acute sensitivity to the ever-changing present.

Of course, it won't hurt to look ahead a bit, in case you can get ahead of the competition, and so many governments do have agencies whose job it is to look ahead in order to keep the economic ship of state plowing steadily forward, ahead of all other ships, if possible.

The story so far.

In summary, the main points to note here are these:

The American government, as the first new nation, was set up in a pre-industrial time on the basis of pre-industrial cosmologies and technologies. With the emergence of industrialization, functions and structures were added willy-nilly to that basic structure in order to enable the nation to become and then continue as a dominant industrial nation with an ever-growing economy. While many of the new institutions subverted the original intention and design, the original structure remains the bedrock of American political ideology, governmental policies, and constitutional interpretations. As a consequence America's desire to be a growing industrial nation is constantly thwarted by those who insist on governing by the "original intention" of the Constitution.

Modern Japanese government, on the other hand, was created after industrialization was well underway, and yet there was no attempt by the Japanese either to "modernize" some traditional form of Japanese governance (as would have been quite appropriate), or to re-invent governance structures on the basis of then-modern cosmologies and technologies (which would have been vastly better). Instead, Japan (like all other nations), adopted a structure still based on the old pre-industrial assumptions of "constitutionalism".

And then, when it had the chance to write a new Constitution after the Second World War, Japan barely changed the formal structure of government at all.

When communist countries collapsed in Europe in 1990, there was once again an opportunity for new governance design, but this did not happen. Old forms were once again unthinkingly adopted.

Even now, the constitution of the European Union is struggling for adoption without any apparent effort to rethink governance structures on the basis of current cosmologies and technologies.

The emergence of futures studies and of the necessity of institutions of foresight.

In the 1960s, when a few scholars first became aware that the pace of social change was accelerating, and permanently so, they pointed out that governments need to establish “look outs” or “institutions of foresight” in order to make policies on the basis of the future and not just the past or present.

In France, one of the major post-war intellectual figures in Europe, Bertrand de Jouvenel, proposed creating what he called "The Surmising Forum", a public institution "to which experts from many different fields will bring special forecasts so that they may be formed into general forecasts" for public debate and discussion, and then for legislative action (Bertrand de Jouvenel, *The Art of Conjecture*, 1965, p. 277).

Johan Galtung from Norway, Robert Jungk, from Austria, Eleonora Masini from Italy, John and Magda McHale from Scotland/Hungary, Bart van Steenberg from the Netherlands, Andrej Sicinski from Poland, Ota Sulc from Czechoslovakia, Igor Bestuzhev-Lada from the USSR, and many more, formed "Mankind 2000" in 1965 and then created what was to become the World Futures Studies Federation (WFSF).

In the United States, Daniel Bell was among the first to call attention to the fact that America was a “post industrial society”. By 1960, more people were working in tertiary or quaternary occupations (law, teaching, media, advertising, service) than in primary (agricultural) or secondary (industrial) jobs. America, he said, is no longer an industrial nation. It is now post-industrial, and other advanced nations will soon follow. As a consequence of that insight, Bell convened in the late 1960s a “Committee on the Year 2000” to study the matter.

At about the same time, Alvin Toffler wrote an article intriguingly titled, "The future as a way of life" in which he asserted that the rate of social change was so great and perpetual that people were living in the future and no longer in the present. He later galvanized the world with his book, *Future Shock*, by pointing out that most of us are living in a state of shock (not unlike culture shock) since we find ourselves in a world for which we are in no way prepared but from which there is no escape. In *Future Shock*, Toffler also presented for the first time a suggestion for a new mode of government called “Anticipatory Democracy”. It was an idea that he, Clement Bezold, and others experimentally elaborated in Hawaii, Washington State, Iowa, New York and indeed in Washington DC with the creation of a Committee on Anticipatory Democracy which made a presentation to Congress in 1975 and led to the creation of the Institute for Alternative Futures shortly thereafter which has engaged congressional and executive leaders in foresight activities continuing to the present day.

Representative and later Senator John Culver, of Iowa, inspired by Toffler’s work, legislated changes in the rules of the American national House of Representatives in 1974 to require all standing committees of the House (except Appropriations and Budget) “on a continuing basis undertake futures research and forecasting on matters within the jurisdiction of that committee” [Staff Report of the Select Committee on Committees,

House of Representatives, Ninety-third Congress, Second Session, Committee Reform Amendments of 1974: Explanation of H. Res 988 as Adopted by the House of Representatives, October 8, 1974. Washington, DC: Government Printing House, 41-730-O, p. 56]. The committee report explaining this provision stated "...these legislative units would have the additional responsibility of identifying and assessing conditions and trends that might require future legislative action. More specifically, this would provide a locus for the systematic, long-range, and integrated study of our principal future national problems.... In this way, it is hoped, the House may become more responsive to national needs, anticipating problems before they become crises". Unfortunately, this rule has seldom if ever been evoked, and standing committees do not achieve the level of foresight the rule intended. Senator Culver also helped establish the US Congressional Clearinghouse on the Future that facilitated futures-oriented discussions among the members of Congress for many years.

About a decade later, in 1983, then Senator (and later Vice President and presidential candidate) Albert Gore, Jr., and Representative Newt Gingrich (who later became Speaker of the US House of Representatives,) jointly introduced legislation into the US Congress intending to establish an office that would provide the American government with a "national foresight capability." This bill did not become law, and the US government still has no systematic foresight capability, although the General Accountability Office and various agencies--especially the military--do from time to time publish reports with a futures time horizon.

Judiciaries in common law jurisdictions, such as the US, exercise considerable policy making powers, and it was the state courts in the US that first began to add futures theories and methods to their strategic planning processes and products. For the entire decade of the 1990s, the State Justice Institute, a federal agency helping to improve judicial administration in the states, had a separate funding category called "Futures and the Courts" which spurred foresight activities in all of the US state courts, and inspired some work in the federal judiciary as well.

Meanwhile, to move away from the American situation, the second world futures conference leading to the WFSF was held in Kyoto, Japan in 1970 with participants from all over the world. From Korea came Lee Hahn Been, Choe Chungho, Choi Hyung Sup, and Sohn Jung Mok. Lee also participated in the "Hawaii 2000" activities of 1970, and went on to create a futures group in Korea publishing many books and monographs on the future of Korea.

Inspired by the Hawaii 2000 activities, the Syed Kechick Foundation held a conference titled "Malaysia 2001" in Kuala Lumpur in 1975. Futurists from around the world participated in an event that may have been instrumental in provoking subsequent future-oriented activities by the leaders of that country.

Several governments of the world have created futures-oriented institutions within their existing governance structures. During the 1970s, Sweden had a Secretariat for the Future

within the Office of the Prime Minister that in the 1980s eventually became a private think-tank in keeping with the privatization mood of the time.

The Scientific Council for Government Policy (abbreviated WRR in Dutch) provided the government of the Netherlands with excellent futures material. They reviewed 25 years of their work in 1997 in a publication titled very cleverly "Wise before the event"--which must surely be a goal of any government, corporation or individual.

A national Commission for the Future was created in New Zealand in 1980 and by the government of Australia in 1986.

In the United Kingdom, a Foresight Programme is administered the Government Office for Science (GO Science) in the Department for Business, Innovation and Skills. GO Science is run by the Government Chief Scientific Advisor who is responsible to the Prime Minister. Each government department has its own scientific advisor (who also retains part time his capacity in academia or industry), and a number of their cross-cutting issues are coordinated through GO Science. The Foresight Programme and GO Science is that they have been a key part of government since 1994, and thus continue their work in spite of changes of government.

Retaining continuity after the person who first championed it has left office has been a key challenge to governmental foresight historically. Often, when the champion leaves, the foresight capability vanishes, until a new proponent arises later. Foresight is not a fad or personal quirk. It is a core competency of any successful institution or individual. It must be firmly institutionalized or it will surely fail.

The honor of "the most futures-oriented governance systems in the world" may well be held jointly by Singapore and Finland.

In Singapore, the Scenarios Planning Office is a division of the Public Service Division, Prime Minister's Office. The Office promotes the use of scenario planning by facilitating the development and dissemination of scenarios to highlight challenges and opportunities facing Singapore. It has published three sets of National Scenarios for Singapore. The 1997 National Scenarios were told from the perspective of the year 2020; the 1999 National Scenarios covered the period 1999 to 2004; and in November 2002, the Office developed National Scenarios for 2025. Since then, the government has sought to move away from scenario planning alone and is striving to incorporate more aspects of futures studies into its foresight activities. From 2007 onward the National Security Coordination Centre and the Centre of Excellence for National SecurityS. Rajaratnam School of International Studies in Singapore have engaged in a very elaborate futures process called RAHS (Risk Assessment and Environmental Scanning).

The Subordinate Courts of Singapore also periodically conduct trend analyses to develop scenarios tailored to the administration of justice, having regard to the larger national and social scenarios. In 1997, it established the Justice Policy Group. This is a strategic think tank that conducts regular environmental scanning. In 2000, the Subordinate Courts

completed its first set of justice scenarios and mapped its preferred scenario up to 2020. Efforts such as these have helped the Singapore Judiciary to achieve international recognition for the quality of its justice system. Since 1998, Singapore has been rated number one in Asia by the Political and Economics Risks Consultancy. The Switzerland-based International Institute for Management Development in its World Competitiveness Report also repeatedly ranked Singapore number one for its legal framework. The Singapore Subordinate Courts are also recognized by the World Bank as a role model for both developed and developing countries in the field of judicial administration, in part because of their futures focus.

However, Finland may have even more comprehensive futures-oriented governmental processes. In October 1993, the Finnish Parliament appointed a Committee for the Future on a temporary basis. The purpose of the Committee was to assist the parliament in evaluating and replying to the Government's proposals on long term issues. Because of the usefulness of the Committee's work, Parliament decided that the Government should present a Futures Report to Parliament at least once during each electoral period. This resolution generated a unique political dialogue between the Government and Parliament regarding the nation's central future-related issues. In conjunction with a constitutional revision, on December 17, 1999 the Parliament of Finland granted the Committee for the Future permanent status. That Committee continues to do impressive and useful work for the Government and Parliament.

Slightly earlier, in 1992, with support from the Academy of Finland, the Finnish Ministry of Education created the Finnish Futures Research Center at the Turku School of Economics and Business Administration. The Futures Center received its first full professorship, under the Finnish system, beginning in January 2004. Higher education in Futures Studies in Finland is coordinated by the Finland Futures Academy, part of the Futures Research Center at Turku. Seventeen Finnish universities are affiliated with it, undertaking a variety of futures research and education activities. The Academy also participates in several futures research programs within the European Union.

Public and private foresight.

It must be noted that while futures is a still fragile flower in most systems of government, it is firmly fixed in most big businesses, and in the hearts and minds of all successful entrepreneurs. While there is much more to be done before futures information sufficiently guides economic decision making, it is clear that at the present time the balance between government and corporate foresight is unsatisfactory from a democratic perspective.

Businesses of course are interested only in themselves, their bottom line, and the compensation they pay their stockholders and executives. Their gaze is tightly focused on themselves, their competitors, and the factors directly affecting their ability to compete successfully. They have no concern about the commonweal, and they are not expect to have any. Often, of course, what is good for a corporation is good for the nation, but that is certainly not always the case.

Yet, if primarily corporations exercise forecast, and governments do not in equal measure, we are in danger of a new colonization--of time, and not of space. Indeed, that is already the case. Huge portions of the future have already been bought up or otherwise controlled by corporations while the general public (and government officials) are totally unaware. Thus, where people might assume that they have freedom of choice in the future, their options might already have narrowed only to those private interests permit.

For this reason alone, it is imperative that governments, who are supposed to be stewards of all their citizens and resources, exercise foresight at least equal to that of the private sector. Moreover, governmental foresight must focus on broad social, cultural and human issues, and not only on matters of economics, science, technology, or military security (which is the case in many of the governmental foresight programs listed above).

As assumptions about the world and our place in it have changed, and one's personal as well as social futures becomes increasingly uncertain, more people seem to be interested in futures studies and are turning to it for answers. Academic programs in futures studies are springing up everywhere once again--as they did in the 1960s and 70s, but this time with the experience of foresight over the subsequent forty years to inform them.

More than just the speed of change.

One reason why futures is experiencing a rebirth now is because the future isn't what it used to be.

When modern governments were created, the future was sufficiently like the past that decisions could be made confidently by rational people who were learned in the ways of the past. One looked for precedent or analogy to make wise and enduring decisions.

With the rise of industrialization, the pace of social change began to pick up, but the goal of change and the image of the future was clearly known. The goal was for the nation to be a successful military-industrial state in competition with other military-industrial states. So while the future was now from the first time intended to be discontinuous from the past, its general contours were well-known--specially for those nations trying to "catch up" with the leaders. As Karl Marx famously said, the future of developing nations is shown in the present of developed nations. Thus everyone behind did their best to catch up, and everyone ahead endeavored to stay ahead by creating new markets, new products, new technologies, in an ever-expanding global economy.

At the same time, many people began to notice that the really-advanced nations were no longer industrial. They were post-industrial. Eventually, they were called "information societies" because the secret to wealth and success was no longer land and the products of land (as was the case of agricultural societies) or even factories and their products as was true for industrial societies.

Information was what produced wealth, and while the theoretical basis of an information economy has never properly been discovered, as long as one could keep innovating while the backward countries kept trying to catch by producing agricultural and industrial products for the advanced nations to buy, the uncertainty of the basis of a post-industrial economy could be ignored.

And then some people began to suggest that the "next society" after information is the "Dream Society" of which Korea itself is the first major example.

But at the same time, for the past fifty years there have been people pointing out the fact that continuous economic growth is unsustainable in a finite world. Continuous growth is the logic of a cancer cell, and cancers end up eating their host and dying with it.

That is what the economy of both the industrial and information societies are doing, more and more voices began saying. We are destroying the very Earth upon which we are entirely dependent. We are running out of energy, of water, of arable land, of clean air, and even of the will to continue to live in the rat-race of continued economic growth.

Nonsense! Many objected. Get back to work and keep the economy growing. We can always find new technologies to solve those problems. There are alternative energy systems, ways to create fresh water and fresh air and to grow crops without soil. And if you don't want to work, then an intelligent robot will take your place.

But then others, who had been looking at the long-range consequences of blind growth began noticing that climate was changing faster than we could change with it, that sea levels were rising, and the catastrophic changes were just ahead. We needed to stop growing, and stop growing now or we all would die and civilization end!

And so the once monolithic view of the future was shattered into a kaleidoscope of wildly different views. Suddenly no one could be quite sure what was coming next.

Can futures studies and futures forecasting help?

What is futures studies and foresight?

First, what is futures studies and foresight in relation to planning, since it is clear that all governments of the world do plan?

PUT DIAGRAM HERE

This diagram illustrates the distinction between futures, planning, and administration. Administration is day-to-day decisionmaking in areas of policy, budget, personnel and the like. In the case of governmental administration, those decisions are supposed to be made on the basis of laws, rules, and regulations and/or orders from superiors. Increasingly those inputs and others are put together into a rational whole that is called a "plan." Most plans deal with the present and perhaps the immediate future. They are

mainly concerned with interrelating all of the various forces and factors that the administrator needs to consider in order to render the best decision possible among many competing interests in the present. This is often called "integrative planning" or "comprehensive planning".

Some plans may also include the extrapolation of certain trends into the future. Some may also extrapolate "high, medium, and low" values for each trend. Seldom are many trends factored together. Rather each trend is examined and planned for separately without systematic regard for the other.

Scenario planning is a process midway between conventional planning and futures forecasting in that it tries to create integrated stories of how many factors might evolve in an integrated manner over time, typically for the next five to ten years.

Futures forecasting generally looks farther out in time,--20, 30, 50 or more years into the future--where "facts" are less certain and yet "possibilities" and alternatives are easier to imagine as becoming realities. One cannot "predict" such a long-range future, but one might be able to "invent" it (or prevent it). One has no choice but to adapt to the present, but one can envision and try to create a more distant preferred future.

Futures forecasting also uses something often called "emerging issues analysis" to identify factors that might be important in the future just as they are beginning to emerge in the present--where their trajectory is uncertain and thus subject to policy guidance. Futures forecasters then combine emerging issues, trends, and other driving factors into sets of "alternative futures" each based on very different assumptions about how the world works, and what factors are most important to observe (and what can be ignored), and how they might evolve.

You might say that futurists seek to render intelligible and manageable what otherwise appear to be a bewildering kaleidoscope fractured images of the future.

At the same time, since futures forecasting focuses on emerging issues, which by definition are things that most people in the present are unfamiliar with, the resulting alternative futures often appear to be "surprising" or even "ridiculous", compared to scenarios that are based on factors already well-known or previously experienced.

It is for this reason that we have discovered what we call "Dator's Second Law of the Futures" which is that "any useful idea about the futures should appear to be ridiculous".

It is this seemingly "ridiculous" nature of alternative futures that often makes futures forecasting unacceptable to hardheaded decision makers who stubbornly live in what C. Wright Mills called the "crackpot realism" of the present. They insist that one of the fractured images must be true and that all the others false. They want a futurist who can "predict" the "correct" future. But that almost certainly is not possible any more, except by sheer luck. Decision makers who insist on being told what THE future "will be"

probably will be told what they want to hear, for a price, by unethical futurists. The prediction very likely will be worthless--and thus dangerous.

However, if anyone will pause and reflect seriously on major turning points in the past, I think she will agree that until they happened they were either considered to be ridiculous--or not considered at all. The abrupt collapse of European Communism in 1990 is one example. The immediate rejection of their so-called "inalienable rights" by many Americans after September 11, 2001 is another. The end of welfare state and the rise of neoliberalism in the 1980s is yet another.

While there are periods of continuity from the past, the future is becoming increasingly discontinuous, and thus the things that policy makers need most desperately to know are those things they don't know, and probably don't want to know, such as the end of "continued economic growth", the reality of "Peak Oil", and the importance of many environmental matters that have been ignored and made worse for such a long time, on the one hand, and the emergence of transhumans, artificial intelligence, and artificial life, on the other.

So futures forecasting differs from most planning in that it asks us to examine and "pre-experience" farther-ranged futures that are substantially different from the present.

And futures forecasting must be done on a continuous, well-funded basis. Nothing is more important to stress than is the fact that good, rigorous and continuous foresight must become a normal, institutionalized and protected part of governance. Moreover, it can not be ignored just because it says unpopular things. That is its duty! Unless most of what a futurist says sounds ridiculous, she is not doing her job, as long as we live in a world of rapid, unexpected, and novel change, as we do now.

Foresight, a fundamental human capacity.

Finally, it is necessary to note that recent research in the development and operation of the human brain--one of the hottest areas of scientific advancement now--has shown how central foresight is to being human. While many animals seem to exercise a kind of foresight, it seems to be a particular forte of humans.

Titles to some research that has appeared in scientific journals within the last year or two state the matter clearly: "The evolution of foresight: What is mental time travel, and is it unique to humans?" *Behavioral and Brain Sciences*; "Remembering the past and imagining the future: Common and distinct neural substrates during event construction and elaboration," *Neuropsychologia*; "Imagining a rosy future: The psychology of optimism," and "The excessive rationality of emotional imagination," both in *Handbook of Imagination and Mental Simulation*; "The prospective brain," *Nature Reviews Neuroscience*; and "Foresight and Evolution of the Human Mind," *Science*.

One of the more startling conclusions comes from Moshe Bar ("The proactive brain," *Trends in Cognitive Sciences*, Vol.11 No.7, June, 2007, pp. 280-289). Bar says that

"rather than passively 'waiting' to be activated by sensations... the human brain is continuously busy generating predictions that approximate the relevant future. ...Rudimentary information is extracted rapidly from the input to derive analogies linking that input with representations in memory. The linked stored representations then activate the associations that are relevant in the specific context, which provides focused predictions. These predictions facilitate perception and cognition by pre-sensitizing relevant representations."

In other words, rather than waiting for "reality" to impose itself on us, as we have long imagined to be the case, our brain is constantly anticipating what is about to happen, and comparing its expectation with reality in order to improve subsequent forecasts.

This insight draws us back to the contention with which we started this essay: the man from Mars would be astonished that governments do not engage systematically in futures forecasting since it is such an elemental feature of the human mind, on the one hand, and because we live in a rapidly changing, unpredictable world, on the other. The predictive mind is itself learning that it must be continuously forecasting and updating its forecasts based on feedback from his earlier ones, constantly learning that what worked before might not work now so that it simulates and pre-experiences many alternative futures in order to be ready for whatever is to come.

It is high time all governments incorporate serious alternative futures forecasting and preferred futures design into all of their institutions of governance. While it would be preferable if this were done within a context of re-envisioning and re-designing government from the ground up, just adding some effective alternative futures forecasting appendages to the old structure would surely be better than nothing.

