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POWER OF INFORMATION: what we learn in the connected global world

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Excellencies, distinguished guests, friends, ladies and gentlemen.

I am honored to be here with you, to celebrate the first anniversary of the opening of the Japanese website of the Bibliotheca Alexandria, perhaps the most ancient academy of human history, open to the wide world of that time, and to celebrate the beginning of the collaboration of the Library with the United Nations University.

First, I would like to note that this landmark project of rebuilding Bibliotheca Alexandria and its renewing inventories was made possible only with; 1) the vision of His Excellencies President Mubarak and Mrs Mubarak; 2) with the commitment of the Government of Egypt as represented by the presence, today, of His Excellencies Minister Dr Helal and Ambassador Abdelnasser, and 3) with the outstanding leadership of Prof Serageldin and hard work of his entire team over nearly the last decade.

International support and collaboration have been also critical to this endeavor to revive and preserve the monumental legacy of our heritage in science embracing the knowledge and wisdom of human civilizations. I am pleased to share with you that we, Japanese, have made significant contributions through several mechanisms.

The program today presents to you; 1) what we know about ancient and renewed Bibliotheca Alexandria and; 2) what we learn of the states of

the connected and flattening world we live today; and 3) reflection upon the legacy of human civilizations, and the origin of our knowledge and wisdom, and; 4) what we face tomorrow and beyond, that is the major global challenge for our generation for future generations.

Incunabula. This Latin word means RRINTED BOOKS between Gutenberg of mid-15th century and year 1501, a span of about 50 years. There are about 30,000 of them, but they changed the way of life and social hierarchy built before in Europe. Implication is that dissemination of information to a larger public sphere, challenges the authority of that time, and may lead unexpected consequences.

Indeed, the incunabula became a foundation of Religious Revolution, challenging the authority of the Church which governed Europe for many centuries, and led to renaissance and modern science. These later results were absolutely unexpected of, by Gutenberg himself, who printed bibles so that many could read the teaching of the Bible.

This shows how great the impact of dissemination of information could be, ENABLING a greater number of people of the society to seek facts and truth, to question and challenge the establishments and the authority based on previous paradigm, and eventually leading to social change, which we call PROGRESS.

Yes, through our civilizations, we have developed letters, then writings them on stones, papyrus or papers which enabled to preserve and transfer indigenous knowledge and experiences beyond small communities to wider human territories and domains and even over generations to follow.

The new media and systems then appeared, disseminated and stored information, such as mailing and postal service, printed books, newspaper, telegram, telephone, radio, television even via satellites, video-recording, to ever widening human sphere and domain, as we hear from Prof Serageldin.

Science, technology and engineering played a major role in our progress in shaping our daily life as it is today in many affluent society, but most dramatic and remarkable progress has occurred in 20th century;

Just think of 100 years ago.

In 1903, the Wright brothers made first successful man-made flight over 10 seconds for 40 meters, but the rest is a history; men travelled even to the Moon; we could fly many places of the world in hours, not days.

In 1905, Einstein proposed a concept of E=MC2, but now we are talking about more and more nuclear energy as a low carbon emitting energy source. Is this truly a correct answer? I am not sure. Where to store nuclear waste? How about risks of accidents and disasters, be it mechanical or human? Technological safety is one thing, but there are many other critical important issues.

But remember, in the 20th Century, we went through World War 1, then World War 2, and the Cold War, which finally ended in 1991. Then, the world got into global market economy in the last two decades.

With growing human population and new rising economic powers, many imminent global issues which developed throughout the 20th century, as we call PROGRESS, became more and more apparent, eg, financial crisis in one country affecting us all to a major magnitude, acute rises in prices of crude oil and foods, rapidly rising energy use and worsening global warming and climate crisis, shortage of water, food, and natural resources, loss of biodiversity, and many others and they are all induced by human activities.

But almost at the same time, the MAJOR REVOLUTION came to our world, that is digital technology which connected us thru computing tools and Internet.

The world-wide-web came in 1992, followed by many ABSOLUTELY NEW

businesses and services, like Yahoo, Amazon all founded in 1994, Windows95. AND then, gradually, but rather MORE dramatically, the world has become connected or the World became Flat as coined by Thomas Friedman. Apple, which delivered first table top computer in early 80s, recovered dramatically since 1997 with iTune, iPod, iPhone; in 1998, Google emerged.

New Information and Communication tools and technologies become smaller, lighter, wireless, mobile, modular; e-mail and mobile phone; they allow from passive to bi- and multi-lateral directions like blog, YouTube, FaceBook.

These extraordinary examples show that impacts in this connected new world could spread with an amazing SPEED and the MAGNITUDE of EXPANSION throughout the world.

I showed here that the Internet is the 'INCUNABULA' OF TODAY, which ENABLEs and EMPOWERs ever greater, now world public ignoring physical boundaries including national borders, thus threatens establishments of old paradigm. As stated a few minutes ago, Internet allows bilateral, written and even visual message delivery anytime from anywhere of the world, impacting greatly upon conventional media and press, and question and challenge the authorities, be it business, academia, politics, government.

The wide public in the connected world has become keenly aware of human misery, and visibly see and feel sufferings of the extreme poverty and inequity within and among nations and regions of the connected world. THIS IS THE STATE OF OUR WORLD TODAY DESPITE EVER GREAT HUMAN ACHIEVEMENTS.

FATES AND COLLAPSE OF HUMAN CIVILIZATIONS

A book COLLAPSE by Jared Diamond, published almost two years ago, is an outstanding science-based analysis of the fates of human civilizations. He presents DISTINCT FACTORS which are common, though different

magnitude, underlying the fate of various civilizations: They are ECOLOGICAL problems.

People in the past INADVERTENTLY destroyed the environmental resources on which their societies depended, thus deterioration of LIVING condition of the societies induced by man or 'ecological suicide or ecocide.'

But, of course, a society's collapse cannot be solely attributed to environmental damage. There are always other contributing factors; environmental damage, climate change- this change was naturally occurring for the past civilizations---, hostile neighbors, and the presence of friendly trade partners.

Regardless of the fates of the past civilizations, past peoples are not stupid, ignorant bad managers deserved for extinction, NOR all-knowingly conscientious environmentalists who could solve problems that we cannot solve today.

Indeed, managing environmental resources sustainably has always been difficult ever since Homo sapiens developed modern inventiveness, efficiency, and hunting skills around 50,000 years ago, the time even before the discovery of agriculture.

Beginning with the first human colonization of the Australian continent around 46,000 years ago, and the subsequent prompt extinction of most of Australia's large animals, every human colonization of a land mass formerly lacking humans has been followed by a wave of extinction of large animals that were easy to kill, or else succumbed to human-associated habitat changes, introduced pest species, and diseases. You could see such examples everywhere.

Since the beginning of agriculture about 10,000 years ago, coverage of the land by the forests has constantly decreased by human use for fire for cooking and heating, as the major energy source for manufacturing and industry --until coals, oils and other fossil energy sources came in our

use---, expansion of farm land, materials for building houses, other small and large structures, boats and ships and for various human use. The results are quite devastating as we see in many places of the world. Many societies and civilizations failed to maintain the forestry and they eventually disappeared or declined severely; they include Easter Island, Haiti, more recently Rwanda.

As to the fates of past societies and civilizations, the significant, but common error we tend to make, is to view past indigenous peoples as fundamentally different from us, highly developed and living in connected knowledge-based society. But this is not the case.

Just imagine, how the Egyptians could build massive pyramids some 4,000 thousands years ago. Can we do that kind of work with the size and such a precision even with engineering technologies of today?

Even 4,500 thousands years ago, they knew how to calculate a circular area of land, and the estimated **Pi** or **π** from its formula comes to about 3.15. You may see these historical facts in documents and films in the Library.

Certainly we are different from those in the past, having powerful technologies, globalization, modern medicine, greater knowledge of past societies and of distant societies of the present. They are good parts of our modern and ADVANCED society

But, we may be at greater risk than the past societies and civilizations in that the same reason we have, ie, powerful technologies, globalization, the dependence of millions and even billions, of us on modern medicine for our survival, and our much larger population itself. They represent significant risks of the same assets of our modern and ADVANCED society.

A good friend of mine, Lord Martin Rees, President of the Royal Society points out in his book 'Our Final Hours,' the greater possibility of man-induced major and catastrophic disasters than natural disasters during this century. We discussed this matter and we both hoped his

prediction is incorrect.

Finally, we may be able to learn from the past, but only if we think carefully about lessons from the past.

I would like to remind you what happened to the Easter Island, well known for its big stone statues, *moai*. Those who lived there in a small isolated island, had difficulties, of course that time, to get out of the island, but competed quite unnecessarily for big statues cutting rich forests and eventually had to almost vanish, suddenly some 150 years ago when the forestry was gone.

When we look at our current and 'VERY ADVANCED' civilizations on the Planet Earth far away from the space, don't we look like those lived in the Easter Island, fighting each other within ONE connected human society, knowing nowhere to get out of the PLANET, and now knowing well our own problems and what to do, but simply CANNOT act.

Have we become smarter? It is not a matter of knowledge, but the matter of wisdom, commitment, and the leadership.

Let us see what we learn, together today, from our great heritage of our knowledge and wisdom.

Think and act even a small step forward.

Thank you and welcome to the Bibliotheca Alexandria.

END OF THE SPEECH