

See this page also at <<http://tinyurl.com/cu6azr>>.

4.1 Summer Computer Simulation Conference (SCSC):

After pioneered in computer simulation starting with the analysis of chemical reaction on absorption of air pollution gases in early 1960s, I created the SCSC in early 1970s, (which hence proliferated in the US and developed countries), at which time I conceived the peace gaming idea mentioned above.

4.2 Global Peace Gaming for Oil Crisis:

At the International Conference on Computer Communication (ICCC) in Washington, DC in 1972, I proposed a global peace gaming to cope with the oil crisis in early 1970s. An outline of the hierarchical structure and distributed components of an integrated, interactive peace gaming/simulation system for energy, economics, and foreign trade in the USA and the Japanese sides was depicted in Fig. 4.1 (Utsumi, 1974a). Each block in the figure represented dispersed, dissimilar computers in those countries were to be interconnected through data telecom network (e.g., Internet nowadays). These computers included simulation models designated in each block. All models would be executed in concertedly via satellite and terrestrial telecommunication links.

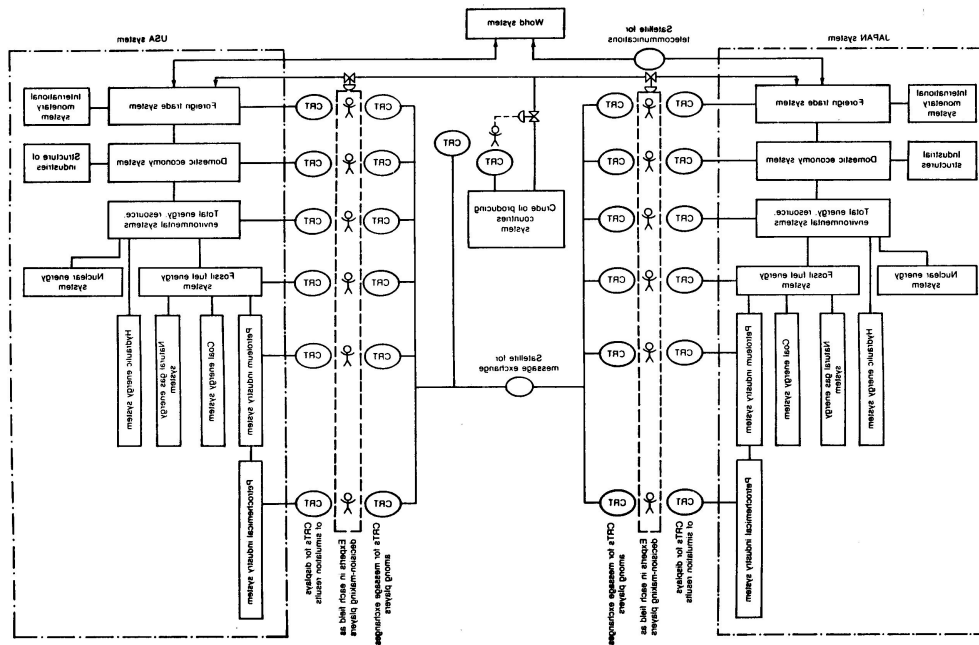


Fig. 4.1: Structure of Integrated Models and Communication Network of GCEPG
 <Structure of Integrated Models and Communication Network of GCEPG_NB copy.pdf>
 <<http://tinyurl.com/dz9ow7>>

For example, suppose pollution in Japan exceeded a certain allowable level, say, around 1977 on Fig. 4.2 (Utsumi, 1974b), the Japanese expert watching it on the display unit would stop the entire simulation. All participants, wherever they were located, would then try to find, with the use of the conferencing system, a consensus on a new set of pseudo-alternative policy parameters which would be executed until a new crisis appears, say, around 1984 in the US side on the figure. The process would be repeated for rational policy analysis, based on facts and figures, and with international cooperation of experts in both countries.

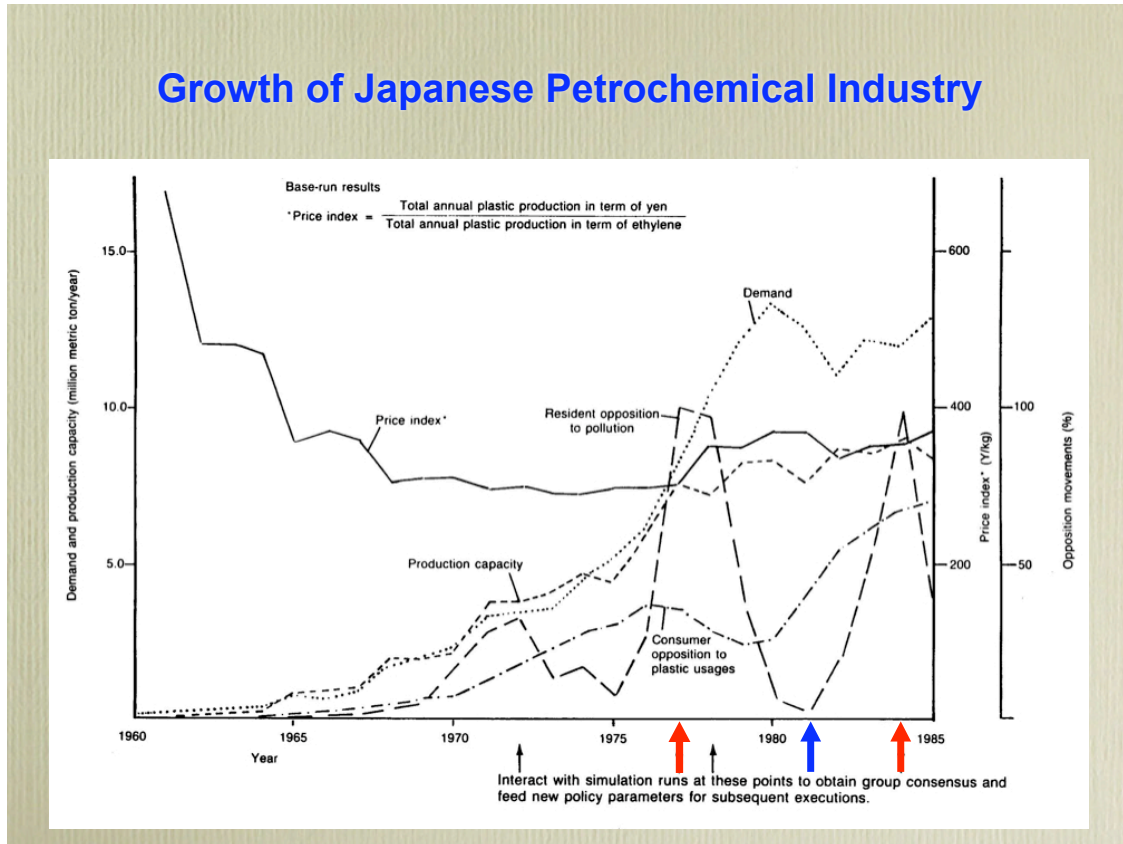


Fig. 4.2: Growth of Japanese Petrochemical Industry
 <Growth of Japanese Petrochemical Industry copy.pdf>
 <<http://tinyurl.com/cumxu9>>

4.3 Encountering with ARPANET:

At the same conference in Washington DC, I saw a demonstration of ARPANET, the first packet-switching data telecommunication network. I then decided to work on its extension to overseas countries, particularly to Japan, because such a network would be the most suitable for our global peace gaming.

Since early 1970s, I pioneered the “closing digital divide” with substantial time, effort and private fund as extending U.S. data telecom to Asian countries, particularly to Japan, and deregulating Japanese telecom policies for the use of email (thanks to help from the Late Commerce Secretary Malcolm Baldrige) (Fig. 4.3) [Chapter 1 of Utsumi’s Proposed Book]. This triggered the de-monopolization and privatization of Japanese telecom industries. This movement has been emulated in many other countries, as having more than one billion email users around the world nowadays. American and other countries’ university courses now reach many developing countries.



UNITED STATES DEPARTMENT OF COMMERCE
International Trade Administration
Washington, D.C. 20230

APR 6 1982 April 6, 1982

Dr. Takeshi Utsumi
Global Information Services
43-23 Colden Street
Flushing, N.Y. 11355

Dear Dr. Utsumi:

Enclosed are three cables from the U.S. Embassy in Tokyo reporting on the recent move by the Ministry of Posts and Telecommunications (MPT) to remove the usage restrictions on the ICAS system.

According to the Embassy, MPT's action will allow Global Information Services to offer electronic mail, computer conferencing, and word processing services to Japanese customers via the ICAS system. It thus appears that Global's TFC case has been favorably resolved.

Please review the enclosed cables and let me know your reaction. If you have no objection, we will close this case.

Sincerely,

Philip R. Agres
Philip R. Agres
TFC Staff Officer

Enclosures (3)

Fig. 4.3: Deregulation of Japanese Telecom Policy for the Use of Email
<Deregulation of Japanese Telecom Policy for the Use of Email_NB copy.pdf>
<<http://tinyurl.com/cgxr3d>>

4.4 Demonstration of Global Peace Gaming in Quantitative Mode:

I then conducted a demonstration of global-scale peace gaming at the conference on "Crisis Management and Conflict Resolution" by the World Future Society (WFS) in New York City, in 1986. It was one of the largest and perhaps the most successful demonstration of global gaming/simulation organized so far. The event was on a crisis scenario involving the U.S.-Japan trade and economic issues. Nearly 1,500 people took part in New York, Tokyo, Honolulu, and at the World's Fair in Vancouver, B.C. An officer of the United Nations wrote a game scenario, and Prof. Onishi in Tokyo supplied FUGI Global Modeling System, which is the world largest econometric model [Onishi, 2003] [Onishi, 2007].

Noted U.S. economists (Prof. Lester C. Thurow of M.I.T., Provost William Nordhaus of Yale University, Mr. Keith Johnson of Townsend and Greenspan Company) were panelists of this event and electronically interconnected with Japanese counterparts for three days of computer-assisted negotiations. Several hypothetical policies were examined. One question by President Emeritus of American Arbitration Association was the effect of raising military expenditures in Japan to the American level while lowering those of the U.S. to the then Japanese level. Simulation predicted that the balance of trade would thus be even by the year 2000, with necessity of cooperation, rather than competition, by both countries in the future. This clearly indicated the cost and dilemma of American's nuclear umbrella protecting Japan's economic prosperity, thus threatening American's economic prosperity.

This event, combined with the use of inexpensive delivery systems, afforded an opportunity to contemplate how academic departments might become linked across national boundaries for the purpose of joint study, research and planetary problem-solving without expending high cost for satellite video. After this successful sessions, several former high ranking officers of the U.S. and Japanese governmental agencies expressed strong interest in a similar multi-media teleconferencing on a more regular basis to establish an early warning system for both countries' ever-closely interwoven, interdependent economic and trade relationships. System analysis for systemic change at the global level is a precondition for any significant resolution to today's global-scale problems.

4.5 “Global Lecture Hall (GLH)” Videoconferencing:

I then made another major contribution towards fostering global dialogue and creating learning environments with the innovative distance teaching trials. These were a series of “Global Lecture Hall (GLH)™”, multipoint-to-multipoint multimedia interactive videoconferencing, using affordable hybrid delivery technologies, which often spanned the globe. They were conducted, once or twice every year for over a dozen years, as promoting global e-learning and e-healthcare/telemedicine, including demonstrations of telemedicine from Finland and Amazon to the US.

4.6 Lord Perry Award for the Excellence in Distance Education:

Thanks to these efforts and also for initiating the movement of global e-learning since early 1980s, I received the prestigious Lord Perry Award for the Excellence in Distance Education, the highest honor in e-learning field, in 1994 from Lord Perry, the founder of the U.K. Open University. The two-year senior recipient of the same award was Sir Arthur C. Clark, the inventor of satellite.

4.7 Creating Global University System (GUS):

GLOSAS/USA then initiated the project of creating Global University System (GUS) [Utsumi, et al, 2003]. The GUS is a worldwide initiative to create advanced telecom infrastructure for accessing educational resources around the world (Fig. 4.4). The aim is to achieve "education and healthcare for all," anywhere, anytime and at any pace.

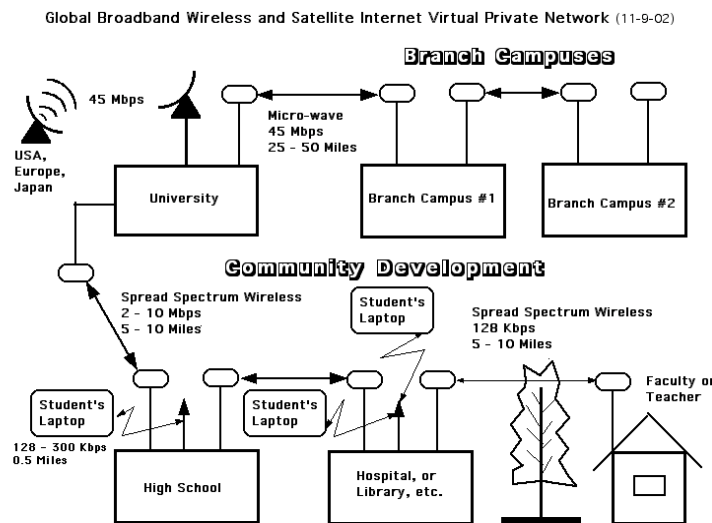


Fig. 4.4: Global Broadband Wireless and Satellite Internet Virtual Private Network (11-9-02)

<Global Broadband Internet (GBI)_NB copy.pdf>

<<http://tinyurl.com/ddvvyyc>>

GUS aims to build a higher level of humanity with mutual understanding across national and cultural boundaries for global peace [Varis, et al, 2003]. The GUS helps to create a worldwide consortium of higher educational and healthcare institutions in remote/rural areas of developing countries with access to 21st Century education and healthcare via broadband Internet. These institutions also act as the knowledge center of their community for the eradication of poverty and isolation through the use of advanced Information and Communications Technologies (ICTs) (Fig 4.5).

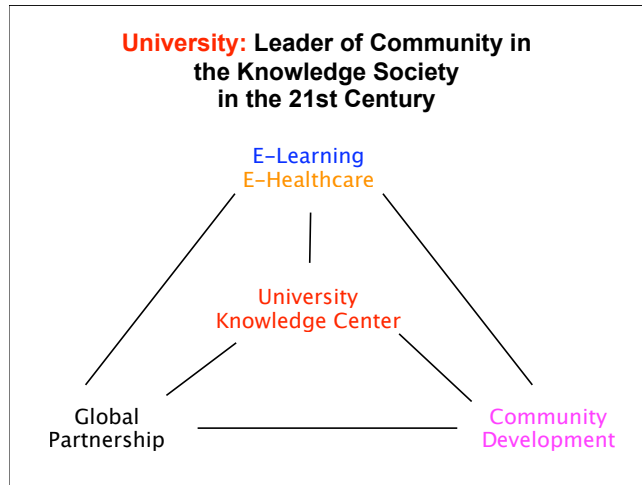


Fig. 4.5: University as the Knowledge Center of Community
<University as Leader of Community_NB copy.pdf>
<<http://tinyurl.com/dmxyq9>>

Learners may take courses from different member universities around the world, obtaining their degree from the GUS, thus freeing them from being confined to one academic culture of a single university or country. The GUS program is a comprehensive and holistic approach to building smart communities in developing countries for e-learning and e-healthcare/telemedicine. GUS' in various countries are to supply tech support, modelers, and gaming players to the GCEPG project.

References:

“Global Lecture Hall (GLH)”
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