

Publisher's Note

On Purpose

By Naohiro Amaya

Humans work to attain certain goals, and information plays an important role in helping us to achieve these goals. For example, in searching for the nuclear submarine, *Red October*, we need first to know its capabilities, present location, what direction it is headed in and so forth. Then we need additional information to decide how to go about the search. Finally, after we have selected a plan, we need to decide whether or not to go ahead with the search. And even after we make our decision to go ahead, we need to continue collecting information so that we can adapt to changing circumstances as we go along.

For a long time we depended on intuition and information painstakingly collected and processed. But today, sophisticated computer technology has considerably expanded both the quality and quantity of information avail-

able to us, greatly enhancing productivity and generating more leisure time.

With more leisure time we must stop and consider how best to use this time. No computer can do this for us, for the question of how to spend our leisure time, how to spend our lives, involves making value judgments that only the individual human being can make. Information processing is an efficient tool for achieving an end; but it is only a means, not a goal. The question of why we might want to track the *Red October* is a question of values, and not even the most sophisticated computer is able to make such value judgments.

It has often been said that we eat to live, not live to eat. In an impoverished, starving society, eating might well be the primary goal for most people. But in most societies today, particularly in the industrialized nations, our basic needs are amply met and eating is not in and of itself so important. Where this need can be easily met, it recedes in importance and new objectives arise. Having conquered most of the known world, the ancient Romans were unable to make the transition to new goals, and

their continuing infatuation with bread and circuses was symbolic of the emptiness that led to their eventual downfall.

Prior to the computerization of information processing, only an elite group in society had ready access to important information and this information monopoly was the secret of their charismatic appeal and power over the masses. Now computerized information processing has put information in the public domain and made it available to one and all. Information has become as readily available as food, and it has thus largely lost its pre-eminent position in our value systems. The information revolution has enhanced the individual's freedom, but at the same time weakened the counterbalancing force of social cohesion. We run the risk today that our information technology—our ability to obtain and process vast quantities of information—may get ahead of our purposes and we may end up idle spectators at the information circus. For all of our high-powered number-crunching capabilities, our information is only as good as the uses we put it to.

Letters

The Old Breeders

Shozaburo Kimura draws a pretty pessimistic picture of Japanese youth in "The New Breed." One wonders whether his observations apply to young Japanese in general, or only to those living in Tokyo and other big cities. If the passiveness and unconcern he described are typical, then where do they come from?

I don't disagree with Kimura's view that Japanese were drawn together in the past by the sharing of discomforts, and that higher living standards have made them more self-sufficient and thus more potentially isolated. But surely the problem goes beyond that. What are parents, teachers, politicians and others in positions of authority conveying to young people about the value of personal interaction? Are they showing them that it can be both interesting and worthwhile?

Kimura tells of young people who won't open the window in a sweltering subway car because they have "no way of knowing" if others are hot, as if drenched shirts and energetic fanning were not sufficient evidence. Are they actually incapable of making such an elementary deduction? Kids are taught how to score well on tests, how to dress fashionably (clothes and make-up account for perhaps 80% of the articles in girls' magazines) and how to keep up with the latest fads. They are pushed constantly toward the safe, the tried, the unobjectionable. Taught to move in carefully laid out paths, they receive approval for getting into the right schools, wearing the right clothes and landing the right jobs. But where are they shown that there might be value in dealing with unfamiliar people and situations? What effort is made to foster a genuine concern for others?

One clue might be found in Kimura's anecdote about the students who watched their teacher struggle to put up a heavy map, not one of them offering to help. "Were (the teacher) to ask for help," Kimura writes, "they (would have been) happy to oblige." But she *didn't* ask. I don't know why, but perhaps it's the same reason older people, not to mention mothers carrying babies and packages, stand stoically and silently on crowded trains while healthy youngsters monopolize the seats.

If those in authority in Japan are dissatisfied with the "new breed," they must accept some responsibility for having made them the way they are. They should take a good look at the values they are imparting through the schools and, especially, the mass media.

One can only hope that there will soon be an end to the untamed consumerism, the obsession with the superficial and material, that has followed Japan's rise to affluence and, with luck, will recede once the nation becomes accustomed to its new wealth. Even today there are many young Japanese whose concerns reach deep and who harbor a healthy curiosity about people and ideas. They have a real desire to reach out—something that parents and teachers must encourage if they want their children to grow into positive, independent-minded adults.

Beverly Delson Hasegawa
Translator
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The Price of Free Trade

As a student of Japanese exporting and importing systems, I was shocked to read the article "Maintaining Japan's Self-sufficiency in Rice" by Iwao Yamaguchi (March/April 1987 *Journal*).

Similar to the rice industry in Japan, the U.S. auto and steel industries enjoyed economic success for many years. However, after the oil crisis of the 1970s, they began to lose out to foreign competition in a free market system.

Today, Japan is faced with stiff international competition which threatens industries such as rice production. According to Yamaguchi, "the U.S., in a selfish bid for profit, is completely ignoring the social, economic, cultural and political importance of rice in Japan." How can he call this selfish? The United States has allowed free competition. Now, it seems that once the U.S. has a superior product, Japan is the victim and the U.S. the bully.

I would like to point out that U.S. rice is cheaper and tastes better. I believe Yamaguchi is ignoring this fact because of his own selfish political interests. Free trade means that some industries will suffer because someone will always be the best. In the 1970s the U.S. auto and steel companies lost out as Japan "in a selfish bid for profit" completely ignored "the social, economic, cultural and political importance" of these industries in America. Today, it's Japan's turn to understand the sacrifice it must make to keep this free trade system alive. Or would Yamaguchi prefer we abolish the free trade system altogether?

It's painful to grow up, but it's time Japan and people like Yamaguchi realized the meaning of fairness in an open market.

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The *Journal* welcomes letters of opinion or comment from its readers. Letters, including the writer's name and address, should be sent to: the Editor, Japan Economic Foundation, 11th Floor, Fukoku Seimei Bldg., 2-2 Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo, 100 Japan. Letters may be edited for reasons of space and clarity.

TOPICS

A Heyday with Hay Fever

Between February and May each year, millions of Japanese are plagued by chronic runny noses, uncontrollable sneezing and itchy eyes. The cause of this seasonal plague? Pollen wafting from the flowers that bloom in the spring.

An estimated 6-10% of all Japanese are believed to suffer from allergic reactions to pollen, or hay fever. The worst offender of all is cedar, found virtually everywhere in Japan. According to the Ministry of Health and Welfare, there are as many as 10 million hay fever patients nationwide.

The best way to prevent hay fever is to avoid inhaling pollen. But that is easier said than done. Cedar pollen measures only 20 to 30 microns in diameter. Since a micron is just 1/1000th of a millimeter, only special masks can keep it out. At least a dozen Japanese companies are already producing special pollen allergy masks. The biggest player in this unique market, however, is 3M Health Care Japan, a joint venture between U.S. chemical giant Minnesota Mining and Manufacturing (3M) and the Sumitomo group. The Tokyo-based company, 75% owned by 3M, produces pollen allergy masks incorporating know-how the American parent has gained through years of supplying countries around the world with masks against industrial dust, volcanic ash and other harmful substances.

In Japan, masks to combat pollen have traditionally been sold to doctors. Starting this spring, however, the specialized masks designed to cover both nose and mouth have begun appearing in local pharmacies. The science fiction-like masks are completely unlike the gauze masks Japanese are used to wearing when they catch cold. Nonetheless, says a 3M Health Care spokesman, "the response from consumers has been excellent."

Researchers have already unraveled the mechanism behind hay fever, but effective treatments to cure or prevent the allergy are still in the testing stage. Consequently, manufacturers are eagerly competing for a share of this huge 10-million-person market with an arsenal of eye drops, nose drops and other medicines as well as preventive masks. This year many pharmacies have even set up special "Hay Fever Corners" to peddle these wares. All of Japan's leading pharmaceutical firms have come out with eye drops reputed to

stop the distinctive itchy and watery eyes that accompany hay fever, products they hope will revitalize an eye drop market that has been stagnant for years.

Scientists have already come up with experimental vaccines to prevent pollen allergies, according to Japan's Institute of Public Health. Animal experiments are under way, and clinical tests should begin next allergy season to establish their safety with human patients. Nonetheless, even if all goes smoothly it will still be at least two years before the vaccines enter general use. Until then, there is nothing to do but continue to wear preventive masks, use eye and nose drops and keep a pack of pocket tissues handy.

Japan Launches Momo-1

In a breakthrough heralding Japan's full-fledged entry into the practical application of space, the nation's first earth observation satellite roared into orbit from the National Space Development Agency (NASDA) Space Center on Kyushu's Tanegashima Island on February 19. An hour after the flawless launch, the satellite entered an initial orbit around the earth at an altitude of 900 kilometers.

Dubbed "Momo-1" but officially named Marine Observation Satellite-1 (MOS-1), the satellite will send priceless data to the earth over the next two years that should aid Japan's agriculture, forestry, fisheries and resources exploration. It also opens the door to wider international cooperation in the utilization of observation data. A number of Asian countries have already asked Japan to provide satellite data to assist their economic development.

Momo-1 is the third earth observation satellite in operation after the American *Landsat* and France's *Spot*. A crystallization of advanced remote sensing technology, it has three "eyes" focused on the earth below. One is a multispectrum electronic, self-scanning radiometer (MESR) that can pick out objects on the earth's

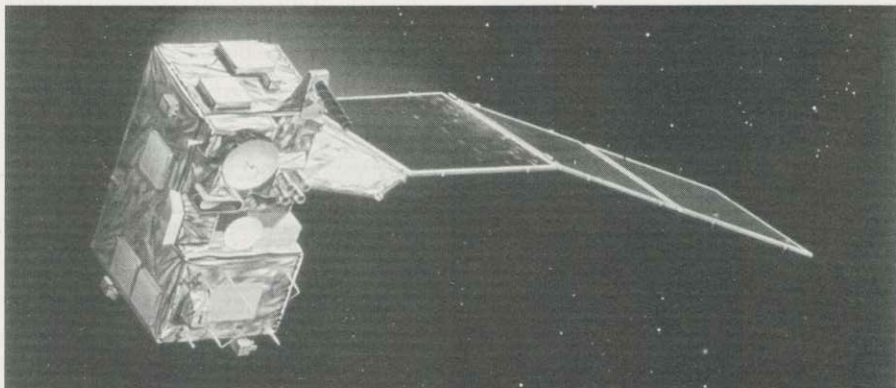
surface as small as 50 meters in length. A visible and thermal infrared radiometer (VTIR) can monitor sea and land temperatures, water vapor and thermal distribution, while a microwave scanning radiometer (MSR) observes the quantity of water vapor, snow and ice on the earth's surface. *Momo-1* is the first satellite in the world to simultaneously gather data on sea, land and atmosphere using these sensors.

The data collected by the satellite are relayed to NASDA's Earth Observation Center at Hatoyama in Saitama Prefecture northwest of Tokyo. Japan's Fisheries Agency and Meteorological Agency are analyzing the data to locate ideal fishing grounds and improve the reliability of weather forecasts. Tokai University and many other private organizations are also cooperating to establish data-analyzing technology.

Meanwhile, Asian countries are showing a keen interest in *Momo-1*. Most enthusiastic of all is Thailand, which has already decided to build an earth station to receive transmissions from the satellite. Thailand plans to use the data to keep track of soil erosion in its northern territory and to monitor sugar cane and rice crops. It also hopes to improve its understanding of conditions in the Gulf of Siam as a step toward fostering more systematic fisheries. Japan has already pledged its technological support for these projects.

Indonesia plans to use data from *Momo-1* for a geological survey of its outlying islands and to improve mineral resources development technology. The Geological Survey Institute of Japan's Agency for Industrial Science and Technology, attached to the Ministry of International Trade and Industry, is lending the project a helping hand.

The Philippines and Singapore hope to use data from *Momo-1* in the conservation of endangered tropical forests. The European Space Agency (ESA) and Australia have also expressed a desire



Momo-1, gathers marine, land and atmospheric data.

Photo: NASDA

to receive satellite transmissions. In all, nine countries have offered to join in an international project to analyze *Momo-I's* data. According to NASDA, aid to Asian countries is an important part of the satellite's mission. NASDA does not expect to fully recover the cost of the satellite, which is costing the Japanese government ¥51.6 billion to build and operate over its two-year designed life.

First Shots Fired in the Battle of the DAT

The "dream audio system" of the 1980s has finally made its marketing debut in Japan. But a sharp conflict of interest between makers and recording companies may keep it out of the hands of all but a handful of Japanese audiophiles for a long time to come.

The object of the uproar is DAT, for digital audio tape recorders. Using digital technology instead of the analog format of existing tape recorders, DAT offers outstanding sound reproduction. Heralded as the up-and-coming star of the next generation of audio equipment, DAT has already excited the keen interest of consumers.

The recording industry, however, is decidedly lukewarm. Fearful that DAT's high performance will exacerbate the problem of pirated music tapes, record makers are demanding compensation before they give the new system their blessing. Although manufacturers agreed on uniform technical standards for both DAT players and DAT tapes in June 1985, they had been holding back their new products until the dispute could be resolved.

In late March, however, the dam finally broke. Matsushita Electric Industrial Co., Sharp Corp. and Aiwa Co. simultaneously put DAT equipment on the market. Victor Co. of Japan, Hitachi, Sony Corp.



Digital audio tapes (DAT): "dream" audio source or source of conflict?

and Toshiba Corp. were not far behind. All the systems are priced in the ¥200,000 range (around \$1,300 at the rate of ¥150/\$), and for the time being will be sold only in Japan. Planned production for the initial year is a modest 50,000 sets. Within three years, however, domestic output is expected to surge to 6 million. If foreign sales are included, industry analysts expect production could pass the 30 million mark in 1990.

Whether that actually happens, or whether the dream audio system remains only in the hands of audio devotees, will depend largely on the outcome of the dispute with record companies. Talks between audio makers and recording firms have yet to bear fruit, and the record industry still has not decided to go ahead with issuing DAT music tapes. Moreover, DAT has been designed to use a different recording frequency in order to prevent recordings from compact discs, another digital audio technology. As a result, the only use DAT can now be put to is recording radio programs and television soundtracks.

It will take the release of DAT music tapes to break the market wide open. However, DAT sound reproduction is so good that scores of copies can be made from a single DAT tape without any deterioration in quality. Recording companies, fearing a drop in sales of their original tapes and records, are demanding that manufacturers add an additional charge to the price of DAT equipment and turn it over to them as compensation. Audio makers reject the idea.

Other problems may lie in wait overseas. There is concern in some corners that sales of DAT equipment will crimp the market for CD players and records in the United States and Europe at a time when it is finally beginning to show signs of life. Moreover, the U.S. government has strengthened its stance on copyright protection. There are already moves in the U.S. Congress to restrict imports of DAT equipment which does not come equipped with systems to prevent copying.

Japan: Top Aid Donor

Japan was the largest donor of economic assistance to developing countries in 1985 among the 18 member nations of the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD), according to an annual official report on economic cooperation. The 1,100-page report, released Feb. 12 by the Ministry of International Trade and Industry

(MITI), stresses the need to promote a new economic cooperation plan—dubbed the New AID Plan (New Asian Industries' Development Plan)—starting in fiscal 1987. The New AID Plan is designed to encourage the "creative international division of labor" in connection with Japan's industrial restructuring. Specifically, it calls for developing countries to promote export industries through closer Japanese cooperation.

The White Paper on Economic Cooperation reports total DAC assistance in 1985 plunged 45.4% worldwide to \$46.3 billion due to sharp declines in private-sector aid that more than offset the steady rise in official development assistance (ODA). Japanese aid tumbled 25.4% to \$11.2 billion in the absence of additional monetary contributions to the World Bank and other international organizations. But U.S. aid, which led the world in 1984, declined even more sharply, leaving Japan the top donor nation for the first time since DAC was established in 1961.

Japan's ODA, however, fell 12.1% to \$3.8 billion in 1985, only 0.29% of its gross national product (GNP), putting it 15th among the DAC nations. The report emphasizes the need to improve aid quality through interest rate cuts on official credits, increased outright grants and other measures, as well as increasing absolute aid volume.

Developing countries have been hit hard by sagging prices for oil and other commodities and the economic slow-downs in industrial nations. The MITI report urges developing countries to develop export-oriented industries to bring in the foreign currency urgently needed to enable them to push industrial development while improving their debt repayment capabilities. This, the report adds, will lead to establishment of an international division of labor between Japan and developing nations, and will contribute to a shift in Japan's industrial structure to one more in harmony with the international community.

The New AID Plan proposed in the report is expected to help promote this new form of economic cooperation. It calls for assisting developing countries not only in such "hardware" areas as infrastructure but also in "software"—technology, management and marketing know-how—with private-sector help. Japanese investments in Asia are already moving in this direction, as exemplified by an increase in investments aimed at generating exports to Japan and third countries, as well as a rise in investment by smaller Japanese companies and expanded local parts procurement.