

Business Briefs

Science

Sound emissions found in the human ear

Otoacoustic emissions, sounds produced within the cochlea of the human ear first discovered in 1978, have been under intensive study in recent years.

When a sound-producing device inserted into the ear emits a brief click, a healthy cochlea responds a few thousandths of a second later by sending back an echo-like copy of the click. The phenomenon is known as an "evoked otoacoustic emission," and is absent from the deaf, including deceased persons.

Dr. William Brownell of Johns Hopkins School of Medicine has carried out intensive anatomical investigations of the Organ of Corti, a specialized organ in the cochlea, which harbors three rows of 15 or more U-shaped stands of hair cells. Each outer hair cell is connected to two nerves, one going to and one coming from the brain. At the top of each hair cell are about 100 tiny rigid spines called stereocilia. Brownell thinks the stereocilia are bent back and forth by the air pressure variations in a passing sound wave, and the bending is transmitted to the parent hair cell as an electrochemical oscillation.

Brownell and others believe the outer hair cells function as amplifiers to maintain a smooth progression in sound perception from soft to loud. This evolutionary refinement in the hearing organ, apparently unique to humans, might be necessary for the understanding of speech. Fish, reptiles, and birds, among other animals, do not produce otoacoustic emissions.

International Credit

Forget development, bank chief tells Third World

The nations of the South may not like it, but they will have to forgo economic development to protect the environment, says the head of Switzerland's Bank for International Settlements (BIS). The unprecedented statement by

Al  xandre Lamfalussy appeared in the BIS's just issued annual report.

"More and more people have become convinced of the urgent need for action to protect the life-supporting properties of the Earth's atmosphere," he writes. "Such action may mean channeling resources into the defense of nature on a scale which cannot fail to restrict growth indirectly by absorbing funds that would otherwise have been destined for 'productive' investment."

These concerns, he adds, are "much more important in the relationship between North and South. The developing countries want for themselves what the developed countries already have. Arguments amounting to denying them progress in this direction and restricting further population growth are seen by some in developing countries as hypocrisy, an attempt by the developed world to defend its fortunate position against the have-nots. The whole issue is one of utmost complexity. . . . It may be hard enough to feed the present world population by using production methods which do not place too heavy a burden on the environment; the prospect of population increases on an unprecedented scale year by year makes the matter a frightening race against time."

World Bank head Lewis Preston, in a speech delivered at the recent so-called Earth Summit in Rio de Janeiro, said that the World Bank is now demanding "environmental action plans in developing countries" as a prerequisite for any World Bank project lending.

Monetarism

IMF under attack for Russia policy

A former member of the board of Deutsche Bank has attacked the International Monetary Fund (IMF) and World Bank for incompetent interference in the Russian economy. At an East-West economic forum in Berlin on June 15, Axel Lebahn, who is now a consultant on Russian-German joint ventures, said, "The IMF and the economic advisers from Harvard have produced nothing but stereotyped ap-

proaches that are far from the Russian reality."

Lebahn said western governments and monetary institutions should see to it that their policy does not dissolve into "funding an economic war of the [former Soviet] republics against each other."

He charged western governments, the IMF, and World Bank with imposing conditions for aid that amounted to "interfering in the inner affairs of the Community of Independent States" to an extent that "rejection and mistrust among the population" would be the consequence—and this at the expense of market reforms: "Certain groups in Moscow are already building their political ambitions on that situation."

Meanwhile, the June 16 *New York Times* ran a lead editorial entitled "The IMF's Ruinous Caution." "Its cramped response endangers Mr. [Russian President Boris] Yeltsin's dream of economic reform," the *Times* said, chiding the IMF for "blocking the release of \$24 billion the West promised to provide in 1992." Yeltsin "has carried out an astonishing array of market reforms even without the promised aid. . . . Now, however, as the economy spirals downward, his Parliament is beginning to question further reforms. In these circumstances, the IMF's caution amounts to reckless inaction. . . . The IMF's response . . . [has been] warm words, harsh demands."

Biological Holocaust

AIDS study sees African population decline

A study released in London projects a population decline in absolute numbers in Africa because of the AIDS epidemic. Roy M. Anderson, head of the department of biology at the Imperial College of Science and Technology, and Robert M. May of Oxford University, say that in many African countries, population growth rates will soon turn negative because of AIDS—i.e., more people will be dying than are being born.

The projections have been presented in medical and scientific journals over the past year, and have now been expanded on by Dr.

Briefly

Anderson at an international conference on infectious diseases in Nairobi.

The Anderson-May findings, according to the June 18 *International Herald Tribune*, claim "that within 20 years, the AIDS epidemic in the worst-afflicted African countries may turn current high population growth rates negative. In Uganda, where 1.5 million people out of a population of 16 million are thought to be infected with HIV, the virus that causes AIDS, the current 3% population growth rate is likely to fall to below zero after 2002, with more people dying than being born. In 15 years, Uganda would have 20% fewer people than if the AIDS epidemic had not occurred." Other countries in Central and East Africa, such as Tanzania, Malawi, and Rwanda, "would be similarly affected."

The Anderson-May results "are far gloomier than those of other mathematical modelers at the World Bank, the World Health Organization, and the Population Council in New York. They have all concluded that population growth in Africa would be curbed by AIDS but would not turn negative."

Food

African leaders to hold talks on starvation threat

Ministers from 36 countries will hold crisis talks in Nairobi, Kenya on the food shortage in sub-Saharan Africa, and some have charged western governments with being partly responsible, Reuters reported on June 20.

Kenyan Minister of Agriculture Elijah Mwangale charged that western governments and donors contributed to the crisis by not subsidizing production of traditional drought-resistant crops and demanding repayment of foreign debts. He said Africa was struggling to service debts of \$380 billion.

"With such large debts and continued political instability, Africans have found it hard to cope with their food needs," he said.

Announcing the talks, Mwangale said problems of food shortages had been exacerbated by civil wars and drought in eastern and southern Africa. "This year, people suffering

from chronic famine in the Horn of Africa, Angola, and Mozambique will be joined by as many as 18 million people threatened by starvation for lack of food and water in southern Africa," he said. "The region accounts for 29 out of 40 low-income food-deficient countries that failed to provide enough food for their people and meet average nutritional standards. This must change."

The United States, Germany, France, Japan, and Australia will be among the donor nations at the meeting, while Kenya, Gambia, Uganda, and Mexico head a team representing developing nations.

The immediate need in the drought-struck region of southern Africa is 14 million tons of outside food aid, while only 8.2 million tons has been pledged.

Ibero-America

Senators vote up IMF 'tax reform' voodoo

The Colombian Senate recently voted up a tax reform package that was designed to meet the conditions set forth by the International Monetary Fund, and did so during an astonishing display of witchcraft and counter-witchcraft between supporters and opponents of the bill.

The reform package will raise taxes and was offered up as the centerpiece of the Gaviria government's economic plan, as designed by IMF advisers.

It was, perhaps, only appropriate, therefore, that during the debate, "Regina 11," a self-proclaimed witch who is an elected senator, put some powder on the chair of Finance Minister Rudolf Hommes, said some incantations, and waved some amulets. Her witchcraft was an attempt to ensure the defeat of the bill.

Hommes, not to be outdone, left the Senate chamber, and returned waving a goat's foot and other amulets of witchcraft to prevent the tax measure from being defeated. He explained that this was "the counter" his "advisers in matters of witchcraft" had recommended for use against Regina 11.

● **CHILD LABOR** is returning in the U.S.A., according to a the June 21 *New York Times*. "Federal statistics indicate that at least 4 million children ages 14-18 are legally employed. But an estimated 2 million other children work illegally."

● **AIDS** and economic deterioration around the globe have led to the resurgence of tuberculosis in Europe and the United States, according to a World Health Organization report, the French daily *Le Figaro* reported June 18. After the "spectacular results of the 1970s," TB's "reawakening is brutal . . . due in significant part to AIDS, but also to the aggravation of socio-economic conditions."

● **'POST-INDUSTRIALISM,'** which absorbed immense funds in the non-productive sectors, was "the idiocy" that ruined Italy, charged Romano Prodi, a former cabinet minister, in an interview with *La Repubblica* daily on June 19. Prodi said banks have developed a life separate from the real economy, and provide it with little credit.

● **GOV. DOUGLAS WILDER** of Virginia called for debt forgiveness for Africa, while in Nigeria June 19. "We should try and wipe the slate of indebtedness clean so that underdeveloped countries can start developing to ensure a better environment, recognize capital improvement, and attack the problem of health," he said, the *Washington Times* reported.

● **CANADIAN** businessmen have shipped Can. \$200 million worth of potatoes to the Russian military, which is to sell them and use the proceeds to set up a new bank in Russia. The aid amount is larger, the CBC reported, than anything the U.S. or Canada has given Russia so far.

● **ASIAN NATIONS** must forge new links to ensure their continued economic success and to guard against emerging trade blocs, Malaysian Finance Minister Anwar Ibrahim told an economic seminar June 15.