PERIODICALS

Reviews of articles from periodicals and specialized journals here and abroad

POLITICS & GOVERNMENT 13
FOREIGN POLICY & DEFENSE 16
ECONOMICS, LABOR & BUSINESS 20
SOCIETY 23
PRESS & TELEVISION 26

RELIGION & PHILOSOPHY 30
SCIENCE & TECHNOLOGY 32
RESOURCES & ENVIRONMENT 36
ARTS & LETTERS 38
OTHER NATIONS 41

POLITICS & GOVERNMENT

Governors Who Last

"Durable Governors as Political Leaders: Should We Limit Tenure?" by William W. Lammers and David Klingman, in *Publius: The Journal of Federalism* (Spring 1986), Institute for Public Affairs, North Tex. State Univ., Denton, Tex. 76203–5338.

The presidency is the top U.S. elective office, but most governors can do one thing that a chief executive cannot: serve more than two terms.

Nelson Rockefeller's 14-year reign in New York, the modern record for continuous gubernatorial service, easily exceeded the record 12-year presidency of Franklin Delano Roosevelt. The mark for the longest *non-*continuous service as governor, 16 years, was set by Ohio's James Rhodes. Michigan's G. Mennen Williams and Arkansas' Orval E. Faubus share the record for consecutive elections: six.

Does long gubernatorial tenure make for good government?

Yes, say Lammers and Klingman, political scientists at the University of Southern California and McGraw-Hill, Inc. They studied "durable" governors, defined as those who get elected at least three times, and serve at least eight consecutive years. In part because about half the states have laws limiting gubernatorial tenure, the list is short: Of the roughly 400 U.S. governors who have served since 1940, only 17 qualify as durable.

As a group, 63 percent were lawyers ("only" 49 percent of *all* governors were). They won office at an average age of 45 (versus 47.4 for all governors). Most notably, the durables were deft at holding the hearts of their constituents, regardless of party ties.

Long-serving Republicans frequently backed "liberal" social programs. Daniel Evans (Washington, 1965–77) championed education, urban renewal, and community health centers; John Love (Colorado, 1963–73) boosted spending on education *and* cut taxes. By the same token, durable Democrats may favor conservative economic policies. John Burns (Hawaii, 1962–73) and Calvin Rampton (Utah, 1965–77) are examples.

Long-lasting Democrats tend to emerge in less populous, demographically homogeneous, rural states where they face little competition (e.g.,



At a \$150-a-plate G.O.P. fundraiser in Cleveland (1984), former Ohio governor James A. Rhodes listens to the keynote speaker, former New York governor Nelson A. Rockefeller. Their gubernatorial tenure records still stand.

Alabama, Wyoming). Durable Republicans flourish in states marked by liberal traditions, much political competition, and, often, by Democrat-controlled legislatures. *All* such governors excel at not wearing out their welcomes. Only eight percent finally get tossed out by the voters—a fate that awaits 30 percent of governors as a group.

Election Plays

"Elections and Wall Street: Taking Stock of Parties and Presidents" by Thom Yantek and Andrew Cowart, in *The Western Political Quarterly* (Sept. 1986), Univ. of Utah, Salt Lake City, Utah 84112.

Stock market predictions are risky. But Yantek, a political scientist at Kent State University, and the late Cowart, who taught at the State University of New York at Stony Brook, assert that there *are* times when forecasting is safe: the six-month period around presidential elections.

Studying market patterns during the 12 presidential election years from 1935 to 1981, the authors found that prices *always* rose during the weeks before polling day. What then happened depended on who won. Almost always, Republican victories sent stock prices up sharply for several weeks more; almost always, Democratic wins brought a decline.

The preelection weeks are bullish, say the authors, because investors buy stocks so as not to be caught on the sidelines if a postelection price surge occurs. That investors continue to buy after a G.O.P. win reflects the business community's "longstanding alliance with the Republican party." After a G.O.P. loss, Wall Street's distaste for Democratic policies prompts a sell-off—followed by bargain hunting. There have been excep-

POLITICS & GOVERNMENT

tions—notably Democrat John F. Kennedy's defeat of Richard M. Nixon in 1960. The market's positive response to JFK's win, the authors reckon, was "a sigh of relief." Indeed, the placid economy of the Eisenhower years

was subsequently perked up by Kennedy-proposed tax cuts.

Only once, 41 years ago, were investors (like other Americans) surprised by a widely unexpected result. "I felt like the moon, the stars and all the planets had fallen on me," said Democrat Harry S. Truman after he defeated Thomas Dewey in 1948. That stock prices fell too, the authors say, is "ringing confirmation" of their theory.

Mayor Power

"Reconstituting the Democratic Experiment: The Mayoralty and the New Democracy" by Russell D. Murphy, in *Urban Affairs Quarterly* (Sept. 1986), Center for Metropolitan Studies, Univ. of Mo., 8001 Natural Bridge Rd., St. Louis, Mo. 63121.

Democracy's institutions are often shaped by people "sure of their own

rightness" but doubtful about "that of the folks next door."

So argues Murphy, a professor of government at Wesleyan University. His example is the American mayoralty, a product of the progressive hopes and conservative fears of 19th-century urban, middle-class reformers. These civic-minded members of Good Government Clubs formed the National Municipal League in 1894. They hoped to end the system of party-based "boss rule" and rigged, ward-based elections, which seemed to flourish in the absence of strong executive authority.

The League developed a "strong mayor" plan to replace the existing system, under which mayors were city council appointees. An *elected* mayor (preferably League-endorsed), the argument went, would seed "honesty, efficiency, and economy" where only corruption had grown.

Despite the reformers' fear that the cities' immigrants—"illiterate peasants freshly raked from Irish bogs, or Bohemian mines, or Italian robber nests," said Cornell University president Andrew White—might not appreciate "moral uplift," several League candidates gained office. And the first immigrant mayors (New York's William Grace, 1880–81, 1884–85; Boston's Hugh O'Brien, 1885–88) won the League's trust.

But by 1915, "strong mayor" zeal was waning. Too many reformminded executives had been "pushed out of office," League members complained, "just as they were becoming a real force." Other mayors (e.g., Detroit's Hazen Pingree, 1890–97; Toledo's Samuel "Golden Rule" Jones, 1897–1905) had used their office chiefly to expand City Hall powers

1897–1905) had used their office chiefly to expand City Hall powers.

Today, Murphy observes, mayors occupy "an uncertain place." Although hizzoners are highly visible in major cities, their powers are limited by state governments (which typically control education, welfare, transportation, hospitals, and public housing) and by city charters which give other executive officers—some appointed, some elected—authority over finance, personnel, tax assessments, and other functions.

Thus the 19th-century city reformers' legacy—"an underlying ambiva-

lence about democratic politics"-persists.

POLITICS & GOVERNMENT

Party Hoppers

"The Party Switchers" by Ronald Brownstein, in The National Journal (Oct. 25, 1986), 1730 M St. N.W., Washington, D.C. 20036.

"Switching political parties can be embarrassing," said the narrator of a television pitch used by Nevada Democrat Harry M. Reid in his 1986 campaign for the U.S. Senate. "Just ask Jim Santini,"

Ex-Democrat Santini had switched to the G.O.P. in 1985. Reid reminded voters of the old days, when Santini's new Republican friends denounced him. (Reid won last November's election handily.)

Party switching is not new, observes Brownstein, a National Journal reporter. But since the landslide 1980 election of (former Democrat) Ronald Reagan, the switching has changed directions. During the 1960s and 1970s, when the Democrats were riding particularly high, especially in Congress and in statehouses, some Republicans—e.g., New York representative Ogden Reid, Michigan representative (now senator) Donald Riegle, former New York mayor John Lindsay-joined them. Then came the Great Society, the Vietnam War, "stagflation," the tax revolt—and a new conservatism among voters. Republicans such as Texas senator Phil Gramm (a Democrat until 1983) began wooing disaffected Democrats over to their side.

Yet last November many Republican newcomers fared poorly. Only six of 11 ex-Democrats who sought G.O.P. gubernatorial, House, and Senate nominations succeeded; only two-governor-elect Bob Martinez (R.-Fla.) Fla.) and congressman-elect Richard H. Baker (R.-La.)—won election.

Among the notable losers were Texas' Kent Hance and Wisconsin's Jonathan Barry, Democrats-turned-Republicans who were soundly defeated in primaries for governor by G.O.P. veterans. Both Nevada's Santini and former Democrat Linda Chavez (R.-Md.) lost Senate bids.

Convert candidates, says Brownstein, always lose some credibility with voters, particularly Republican voters. Indeed, "when the primary field is crowded, the Democratic credentials of the party switchers can stand out like a Mondale-Ferraro button at a Republican convention.

FOREIGN POLICY & DEFENSE

Dealing with New Delhi

"India and the United States: Why Detente Won't Happen" by Maya Chadda, in Asian Survey (Oct. 1986), Univ. of Calif., Berkeley, Calif. 94720.

August 1982: Indian prime minister Indira Gandhi goes to Washington. May 1985: A festival of India begins in the United States. June 1985: India's new prime minister—Gandhi's son, Rajiv—visits the White House.

Are these signs of a blossoming Indo-American romance?

Not really, says Chadda, a political scientist at William Paterson College. Despite Rajiv Gandhi's Western leanings, Chadda notes that economic and political ties between the United States and India have, in many

ways, deteriorated over the last few years. Whereas U.S. trade with China increased by 25 percent during the first nine months of 1985, U.S. trade with India dropped 10 percent from its peak level—\$4 billion in 1983.

The problem is Pakistan, says Chadda. Indian officials view their Muslim neighbor (pop.: 100 million) as a constant threat to India's 763 million, primarily Hindu, people. The countries clash over territorial rights in Kashmir, nuclear issues, and Pakistan's support of India's Sikh extremists, who assassinated Indira Gandhi in 1984. But the White House continues to view Pakistan, bordering on both the Soviet Union and Afghanistan, as an ally. Thus, unlike India, which received 82 percent of its arms from Moscow between 1976 and 1980, Pakistan is U.S.-supplied. It received U.S. aid worth \$4.02 billion in 1986; India got \$311,000.

While U.S. policy makers must consider several factors—including the Iran-Iraq War and the Soviet attempt to subjugate Afghanistan—in formulating Asian policy, the Indians' main concerns are the security of their Chinese and Pakistani borders. "Strategic ties," remarks Chadda, "are forged in response to a perception of common threats. India and the U.S. do not share common threats." The basic Asian political alignments—

U.S.-China-Pakistan, and USSR-India-Afghanistan—remain.

The Carrier Gamble

"Large Carriers: A Matter of Time" by Commander E. J. Ortlieb, in *Proceedings* (Oct. 1986), U.S. Naval Institute, Annapolis, Md. 21402.

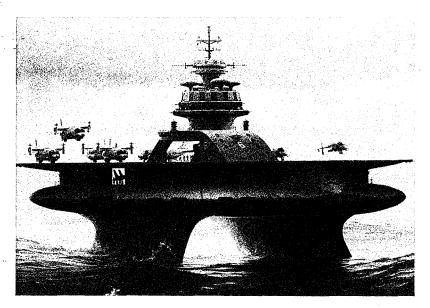
The U.S. Navy has worked hard to prolong the life of its capital ships, big aircraft carriers. The 15 behemoths now in commission—with nearly 100 aircraft and more than 6,000 crewmen apiece—will serve 40-plus years.

That worries Ortlieb, a systems analyst and retired submarine officer. Given the ships' longevity, he says, the Navy's goals of operating 15 carrier battle groups—a carrier plus supporting craft—and building new carriers until "at least" the late 1990s means that such vessels will remain America's capital ships "for another half-century." Is that wise? he asks.

Carrier defenders say that the ships are irreplaceable; for instance, U.S. power in the Middle East is projected mainly by carrier groups in the Mediterranean and in the Indian Ocean. And modern carriers have jet aircraft, nuclear power, and the protection of Aegis cruisers and nuclear attack submarines. Critics point out that carriers face modern *threats* (e.g., homing torpedoes, missiles), and that their survivability has not been tested in combat since World War II.

Ortlieb adds another worry, a historical one: the shrinking time between a weapon's dominance and its decline. Consider, he says:

- The galley ruled the Mediterranean for 1,000 years, as did the Norse longboat elsewhere. But sailing warships made both extinct.
- Steam-driven ironclads outmoded sailing ships within 400 years.
 As the dreadnought ushered in the era of heavily armored, centerline-gun battleships, ironclads became obsolete within 60 years.
 - World War II carriers dethroned battleships within 40 years.
 A sure sign that "doom is approaching" for a naval weapon, Ortlieb



Could many low-cost mini-carriers do the work of a few big ones? Proponents of SWATH (small waterplane area twin hull) craft, like the one depicted here by Morgan Wilbur, say that they have the needed large-ship stability.

argues, is when its "de facto mission has become survival"—which is true, he says, of the heavily defended modern carrier battle group. Thus, the last Mediterranean galleys were huge, "with several hundred galley slaves and hundreds of troops." The sailing ship "met its fate as an elaborate, ornate, 100–120 gun, 1,000-man ship of the line." The last battleships carried almost 3,000 men and "bristled with antiaircraft batteries."

Each of "the queens," notes Ortlieb, "fell victim to longer-range offensive systems." Only "events" will show if carriers can defy history.

A Smart NATO?

"How the Next War Will Be Fought" by Frank Barnaby, in *Technology Review* (Oct. 1986), Rm. 10-140, Mass. Institute of Technology, Cambridge, Mass. 02139.

North Atlantic Treaty Organization (NATO) forces in Western Europe are outnumbered—in troops, tanks, and other categories—by the Warsaw Pact forces they face. Thus, should Soviet Bloc units attempt even a non-nuclear attack, NATO's present policy is to respond quickly with tactical atomic weapons, even at the risk of starting a wider nuclear war.

Barnaby, a physicist and chairman of Just Defence, a British group that promotes *nonnuclear* military strength, argues that this policy is outdated. New weapons—notably "smart" missiles—can stop any nonnuclear assault. A "non-provocative" NATO posture based on such weapons, he

says, would reduce the chances of fighting ever breaking out.

As Barnaby notes, "warfare relies increasingly" on smart weapons. A U.S.-made, \$15,000 TOW or a \$40,000 Hellfire missile can destroy a \$3 million tank. The U.S. Standoff Tactical Missile, which deploys warheads that attack many tanks, is one of several new weapons being developed.

These weapons' abilities are proven—as during the 1982 Falkland Islands War, where British and Argentine missiles sank ships and downed more than 100 planes. Such technology, Barnaby argues, would allow NATO to create a nonnuclear European defense zone, roughly 37 miles wide, along the entire 625-mile East-West frontier. The zone would be saturated with attack sensors and all manner of smart weapons. Mobile squads with "high firepower" arms would deal with whatever enemy forces managed to break through.

Because no counterattack would be needed, NATO forces "would not have main battle tanks, long-range combat aircraft, or large warships.' Nonprovocative defense, while cheap, "morally acceptable, and unambiguously legal," would also, says Barnaby, be "militarily credible."

Battered Lives

"Politics and the Refugee Experience" by Cheryl Benard, in Political Science Quarterly (vol. 101, no. 4, 1986), 2852 Broadway, New York, N.Y. 10025-7885.

Refugees are defined as people who flee from their own state to another because of war, persecution, or personal danger. By the United Nations' last reckoning (1981), the displaced now number some 8.7 million. Most have fled troubles they did not create and often do not even understand.

Benard, research director of the Ludwig Boltzmann Institute of Politics in Vienna, Austria, toured refugee camps in Pakistan, Nicaragua, Lebanon, Ethiopia, Thailand, and the Sudan. She found that the chief result of confinement and enforced dependency was a tendency toward violence.

In Thailand, warring Cambodian groups maintain headquarters in the camps and prey on each other's civilians; in one encampment of 250 Vietnamese, all of the women had been raped by Cambodians. Among Pakistan's Afghan refugees, violence often turns inward. Patriarchal husbands, humiliated by their powerlessness, vent their anger on their families.

Apart from such universal features of refugee experience, actual conditions vary widely. How well refugees are treated often depends upon what (if any) symbolic purpose they serve for their host country. Thailand, having no political use for its Vietnamese and Cambodian refugees, keeps them in a border zone where they are eligible neither for official status nor support from the United Nations' refugee agency.

Refugees in countries considered part of the Soviet sphere also fare badly, says Benard. The Soviet Union does not sponsor refugee relief, and Western relief groups typically refuse to help out Soviet-backed regimes.

By contrast, most of the refugees seen as belonging to the "free world" fare relatively well. Dozens of Western voluntary organizations maintain offices in Pakistan, to help Afghan victims of Soviet aggression.

Like Nazi camp survivors, former refugees remain absorbed in the

singular trauma they endured. Thus the resettled Indochinese in Western Europe still identify with refugees, and try to keep track of them. As for "host" governments, Benard is reminded of how the ancient Greeks viewed refugees: Each was "more than a stranger, less than a citizen."

ECONOMICS, LABOR & BUSINESS

Taxes: VAT Next?

"Worldwide Experience in Sales Taxation: Lessons for North America" by Malcolm Gillis, in Policy Sciences (Sept. 1986), Martinus Nijhoff, c/o Kluwer Academic Publishers Group, P.O. Box 322, 3300 AH Dordrecht, The Netherlands.

West Germany has one. So do Britain, France, and five other Common Market nations. In fact, notes Gillis, professor of public policy and economics at Duke University, the United States and Canada are among "the few industrial countries without a national sales tax."

U.S. critics of taxes on consumption (i.e. purchases)-rather than on earned income—have long denounced them as "regressive": The poor and the prosperous shoulder the same burden. Of course, income taxes, Gillis notes, present big problems too: In inflationary times, they can push middle-income taxpayers into higher brackets ("bracket creep"); and they are costly to administer and vulnerable to evasion. Hence, a national sales levy has generated interest in Washington.

The focus is on the "value added tax" (VAT), whose adoption by such egalitarian democracies as Denmark, Norway, and Sweden-among oth--suggests that regression may not be a great problem.

In a VAT system, suppliers of goods, rather than buyers, pay the taxes. In the dominant type of VAT, taxes are calculated at each stage of a product's manufacture and distribution, but are only paid to the government by the final seller. Firms do not actually reckon the "value added" to a product by them; the tax is merely figured on total sales volume.

VAT systems sound complicated, Gillis says, but are not difficult to administer, and they can be tailored. To promote business growth, capital

goods can be exempted; so can, say, medicine, to help the poor.

In European welfare states, VATs have been touted as a way to cut income levies. In the case of Denmark, the first country to adopt a VAT system (1967), 32 percent of government revenues in 1984 came from a 22 percent VAT. "Developing" nations value VATs as reliable income producers; in such countries as Mexico, Argentina, Morocco, Senegal, and South Korea, VATs provide one-fourth to one-fifth of total tax revenues.

The U.S. Treasury suggested a VAT in its 1984 tax reform proposal. Yet President Reagan staunchly rejects any form of consumption tax. Gillis concedes that introducing an American VAT might meet resistance from state governments (of which 45 levy sales taxes) and that conservatives would view a VAT as an expansion of federal power and a new "money machine" for the Big Spenders in Washington. Yet, Gillis concludes, in an age of huge federal deficits, "public discussion of this option will grow."

ECONOMICS, LABOR & BUSINESS

Mortgaged Future?

"What Hath Conservative Economics Wrought?" by Gerald Epstein, in Challenge (Aug. 1986), 80 Business Park Dr., Armonk, N.Y. 10504.

The news about the U.S. economy, as Reagan administration spokesmen observe, has been pretty good. The inflation rate, which hit 13.3 percent during the Carter years, averaged only 1.8 percent during 1986. Economic expansion continues. Polls find Americans confident of the future.

But Epstein, an economist at the New School for Social Research, is unimpressed. A broad look at the Reagan record, he says, shows that while

the administration "promised a miracle, it delivered a debacle."

As outlined in its 1981 Program for Economic Recovery, the White House sought, with help from Federal Reserve chairman Paul Volcker, to enhance business profits, make U.S. exports more competitive, and prompt growth—while keeping inflation at bay. How? High interest rates would attract foreign investment and trigger a recession, forcing down inflation, wages, and consumer demand. Meanwhile, tax cuts would spark investment and spur industry to supply more goods—another remedy for inflation. The plan, says Epstein, aimed for an "economic equivalent of the Grenada invasion"—a quick victory over inflation coupled with "carrot and stick" business incentives.

But the plan failed. The victory over inflation was real, but Pyrrhic. Between 1980 and 1985, the average real growth rate hit a postwar low (2.1 percent); the U.S. trade deficit soared from \$1.9 billion in 1980 to \$117.7 billion in 1985. And, in 1982, unemployment reached a postwar high: 10.7 percent. Reagan's decision to fight inflation instead of unemployment, contends Epstein, cost the nation from \$800 billion to \$2 trillion between 1980 and 1984, in terms of the lost output of idled workers.

The 1981 tax cuts did not spark investment as much as was hoped, and high interest rates discouraged business borrowing; instead of expanding, firms went on a merger and acquisition binge. Then the "strong dollar" tactic backfired: U.S. wages grew more slowly than did those of the nation's trading partners, but America's business costs increased faster than did its competitors' in 1983 and 1984. The overvalued dollar ended up eroding U.S. gains in overseas markets.

Epstein believes that a policy aimed at lowering unemployment would have tamped down inflation successfully by increasing the supply of goods and services. The Reagan quick fix not only failed, but produced deficits that are "mortgaging our future."

How Bossing Began

"What Do Bosses Really Do?" by David S. Landes, in The Journal of Economic History (Sept. 1986), 3718 Locust Walk, Univ. of Pa., Philadelphia, Pa. 19104-6297.

Are bosses necessary?

Not according to Harvard economist Stephen Marglin. In a widely noted 1974 essay, "What Do Bosses Do?", he argued that capitalist employers do little more than subjugate workers, with a strategy once used

ECONOMICS, LABOR & BUSINESS

by "imperial powers" to rule colonies: "divide and conquer."

With the rise of division of labor in 18th-century factories, bosses were needed, as free-market economist Adam Smith outlined in The Wealth of *Nations* (1776), to streamline production. Indeed, worker specialization became a central feature of the streamlining process: By 1830, Swiss clockmakers divided watch assembly into 50 steps, utilizing nearly 150 laborers to craft a single timepiece. But what the history of high-volume manufacturing shows, according to Marglin, a Marxist, is not a quest for efficiency, but the lengths to which employers will go to turn hired hands into what Karl Marx called "crippled monstrosities."

Landes, a Harvard historian, retorts that history shows nothing of the sort. Factories, he says, did not emerge because owners sought to conquer employees; rather, they appeared when big machines were devised to "overcome the cost advantage" of cottage industry and "put-out" production. Owners, too, did not just coordinate work; they bought materials and sold finished products (thus *creating* profit) and advanced technology. The powered "water frame," Richard Arkwright's 1768 invention for making tough warp yarn, revolutionized textile manufacturing—but only after mill owners adapted it for assembly lines.

Bosses were essential here: "No one else was in a position to look upstream and downstream, as well as to competitors on either side."

As for "crippled" employees, Landes cites an 1806 House of Commons study of England's wool industry: "Not infrequently," it reported, "men rise from low beginnings, if not to excessive wealth...[then] to a situation of comfort and independence.'

In fact, entrepreneur Josiah Wedgwood (1730-95) trained so many specialists for his innovative pottery firm that he had to create managers-"a new profession," notes Landes, some of whom "became employers in their turn." When "workers learn that they can do without the capitalist, it is because they have become capitalists themselves.'

Today, hierarchy—bosses—and technology are as vital to large socialist enterprises as to capitalist ones. "As every good economist knows," says Landes, "there is no such thing as a free utopia."

Defending the IMF

"The IMF under Fire" by Jahangir Amuzegar, in Foreign Policy (Fall 1986), 11 Dupont Circle N.W., Washington, D.C. 20036.

Third World debt, changing exchange rates, yawning trade gaps. The International Monetary Fund (IMF) has much to deal with. During 1980-84 alone, the Washington-based Fund's officials ran 94 "stabilization" programs in 64 Third World nations-all with money woes.

What concerns Amuzegar, a former IMF executive director, is another

problem: rising criticism of the Fund, from many quarters.
U.S. liberals protest that the IMF "bails out big multinational banks." Conservatives dislike its economic meddling, and its aid to anti-Western regimes. Foes on the Left say that its "help" deepens poverty and keeps poor nations in "imperialism's grip."

ECONOMICS, LABOR & BUSINESS

In 1944, when the IMF was founded (along with the World Bank) by the United States and its World War II allies, its mission, writes Amuzegar, was to cope with short-term, "1930s-style exchange and payment problems" in developed countries. The IMF now has no programs in such nations. Since the 1973–74 oil crisis, it has "gradually and erroneously" become "the world's master economic trouble shooter." For this, it has "neither adequate expertise nor sufficient resources."

Even so, argues Amuzegar, most criticism of the IMF is unfair.

The Fund does not, as is often charged, apply the same "draconian" measures to all debtors. When programs in Gabon, Panama, and South Korea were emphasizing "demand restraint," for example, those in Burma and Sri Lanka encouraged public investment and increased imports. As for the allegation that IMF-imposed austerity destabilizes nations, Amuzegar notes that, of the nearly 70 nations under IMF care between 1980 and 1983, only 10 (including the Dominican Republic, the Sudan, and Argentina) have suffered serious social unrest, "not all of it Fund-related." Indeed, "many countries do not come to the IMF until the seeds of political turmoil are firmly rooted."

The IMF is biased toward free markets and free trade, goals enshrined in the Fund's charter. And its operations do reflect its Western founders' predilections: Aid has been denied to Vietnam and Grenada (when under Soviet-Cuban influence), but approved for El Salvador and South Africa. Yet the Fund does have Communist members (e.g., China, Romania, and Hungary), and has helped leftist regimes (in Jamaica, for instance).

The Fund can point to successes. Of the 21 African nations with IMF stabilization programs in 1981–83, for instance, one-fifth met their economic growth targets and half hit their inflation-reduction goals. What the critics should ponder, says Amuzegar, is "where [such] countries would be without the IMF."

SOCIETY

The Mad Colonists

"Madness in Early American History: Insanity in Massachusetts from 1700 to 1830" by Mary Ann Jimenez, in *Journal of Social History* (Fall 1986), Carnegie-Mellon Univ., Schenley Park, Pittsburgh, Pa. 15213.

Madness. In 1702, Cotton Mather defined it as a "black melancholy," inspired by Satan. Most other Massachusetts colonists viewed the mentally ill as merely "distracted"—odd, but not *sick*, victims of the Devil.

ill as merely "distracted"—odd, but not sick, victims of the Devil.

Even so, legend holds that 18th-century New Englanders jailed the insane, and even tortured them to purge their affliction. Not so, says Jimenez, a historian at the University of California, San Diego. While 19th-century mental hospital reformers like Horace Mann did blame abuse of the insane on pre–Revolutionary War practices, it was not until postwar days, says Jimenez, that insane people were beset by "sometimes unhelpful efforts to control them."



Some 19th-century physicians saw the insane as virtual beasts. In his Essays on the Anatomy of Expression (1806), British doctor Charles Bell used this illustration, Madness, to convey a sense of what mental torment could do to a man.

Early 18th-century communities tolerated insanity, to the point of allowing "the distracted" to wander freely if they were not violent. One example: Samuel Coolidge, a Harvard-educated schoolteacher in Watertown, Mass., who, "given to great horrors and despairs," would meander dazed and often naked. He was often locked in the schoolhouse by his town's selectmen—but only so he would be there to teach class.

The colonists sometimes confined insane paupers in almshouses, but not in isolation. They did not try to cure the mad. How could Satan's work be undone? A mind weakened by lust or spiritual ills had provided, as Cotton Mather said, "a bed wherein busy and bloody devils have a sort of lodging." By contrast, suspected witches were punished severely for consorting willfully with the Devil.

Toward the mid-18th century, says Jimenez, "insanity began to be seen as the result of a breach of the natural order"—an illness. By 1767, Boston minister Samuel Philips was directing the mad to doctors instead of cleratures for a look at their physiological troubles.

clergymen, for a look at their physiological troubles.

"If insanity was part of the natural order," Jimenez recounts, "there seemed to be new possibilities for human control" of it. The Massachusetts colonists, as their communities grew after the Revolution, reexamined their old tolerance of the insane. They began invoking long-ignored laws to jail mad folk, even those with money. Physicians tried out "cures"—like bleeding or plunging the insane in cold water—that subsequently led to reforms during the 19th century.

By then, the insane had reason to long for the good old days.

The Housing Game

"Towards a Permanent Housing Problem" by Peter Salins, in *The Public Interest* (Oct. 1986), 10 East 53rd St., New York, N.Y. 10022.

In 1949, the Truman administration pledged to make "a decent home and a suitable living environment for every American family." Since then, Washington has spent roughly \$35 billion on housing, subsidizing 1.2 million new units for the poor, 800,000 apartments for moderate-income families, and 700,000 units for the elderly.

Why, then, is there still talk of a "housing crisis?"

Salins, an Urban Affairs specialist at Hunter College, offers a "moving target" theory: Once one problem is solved, bureaucrats go after another. Thus overcrowding, big news during the 1930s, gave way to inadequate plumbing during the 1940s. Dilapidation became the official priority during the 1960s. Today, "neighborhood quality" and "affordability" top the Department of Housing and Urban Development's list.

Government standards are too "subjective," says Salins. For example, families spending more than 30 percent of their income for rent are officially considered to be in trouble. Of course, as Salins points out, such spending might simply reflect a desire for good living, rather than unrea-

sonable rent inflation.

Moreover, the government's ever-broadening "eligibility base" for housing aid is creating "expectations that can never be fulfilled." Before 1960, housing programs were geared to the poor. Then, during the Great Society era, Washington deemed it vital to help "moderate income" families as well. The unintended consequences were numerous and striking: Less aid went to poorer folk, the always-fragile private low-cost housing market shrank, and older neighborhoods crumbled as upwardly mobile lower-middle-class families moved out.

Housing aid has always been "a lottery," Salins asserts. Today, among 100 eligible households, 85 will get no help at all, three may get a luxury apartment in a new neighborhood, four may get a modest unit in a decrepit

area, and eight may end up with a slight rent reduction.

The bureaucratic impulse to create "a permanent housing problem," Salins argues, is ripe for restraint. A cool look at aid programs might even reveal that the poor do not want "their meager allotment of subsidy crumbs from the public banquet table to take the form of housing assistance at all."

Charting Charity

"Who Gives to Charity?" by Brad Edmondson, in American Demographics (Nov. 1986), 127 West State St., Ithaca, N.Y. 14850.

During 1985, U.S. individuals, firms, and foundations gave nearly \$80 billion to charity—more than twice the amount of only seven years ago.

Moreover, the rise in giving has outpaced inflation every year since 1981, and has exceeded personal income growth since 1982. The all-time peak year of generosity remains 1960, when taxpayers donated 2.2 percent of their net income, but 1985's 2.0 percent was the highest since

SOCIETY

1969. At least 47 percent of the dollars went to religious organizations, but

a wide range of other recipients benefited, too.

Foundations and companies are large donors; corporate giving, up 13 percent between 1984 and 1985, is the fastest-rising area of U.S. charity. But personal giving—83 percent of the total in 1985—still dominates,

says Edmondson, an American Demographics editor.

A Yankelovich, Skelly & White survey found that, while most Americans (89 percent in 1984) are donors, the prime givers have certain characteristics. They tend to be married (or widowed) professionals, aged 35 to 64, who earn more than \$50,000 and attend church; at \$990, the churchgoers' annual giving to all charities is triple that of other folk. (Protestants are the most openhanded.)

Yet all donors with \$50,000-plus incomes have been cutting back lately, and the rich have done the sharpest trimming. America's 16,300 millionaires are the top donors per capita, contributing an average \$139,300 in 1984, but their giving has fallen by 35 percent since 1981. Reason: The Reagan tax cuts. They have raised the cost of donations by

reducing the amount of income that gifts can offset.

Charities are most perplexed by the stinginess of the big baby-boom generation. Yankelovich, et al. found that those aged 30 to 35 gave only 1.7 percent of their incomes, versus 2.6 percent for the 35–49 group and three percent for 50- to 64-year-olds. The acquisitive boomers may be financially strapped. But Edmondson sides with Yankelovich partner Arthur White, who finds that they give only when they feel close to a cause and think they know "where the money is going." Example: The 1986 Live Aid concert, which raised \$70 million to fight hunger in one day.

What is burgeoning is the number of charity seekers. Of the 124,000 nonprofit groups vying for donors, two-thirds did not exist in 1960.

PRESS & TELEVISION

Greeley's Greatness

"Horace Greeley and Social Responsibility" by Warren G. Bovee, in *Journalism Quarterly* (Summer 1986), Univ. of S.C., 1621 College St., College of Journalism, Columbia, S.C. 29208.

Horace Greeley, the editor, social crusader, one-time Republican presidential candidate, and aphorist ("Go West, young man"), made a penny press he started in 1841 one of the 19th century's leading dailies. His *New York Tribune* employed such correspondents as Margaret Fuller, Mark Twain, Nathaniel Hawthorne, and, in London, Henry James and young Karl Marx. For 30 years, his pen ranged with wit and authority over such events as the South's defeat, Reconstruction, and the G.O.P.'s rise.

Upon his death in 1872, the *Tribune* passed to the Ogden Reid family; in 1924, it merged with James Gordon Bennett's *New York Herald*. While "the Trib" still attracted talent (e.g., Walter Lippmann, Joseph Alsop), during the postwar years it lost out to the *New York Times*. New owner

PRESS & TELEVISION



A Thomas Nast view of the Tribune's founder in 1872, the year Greeley ran for president, lost to incumbent Ulysses S. Grant, and died at age 61. "Old Honesty's" sense of fairness was not to be confused with weakness. No subscriber to a paper, he wrote, "becomes one of its Editors, any more than by riding on a steamboat he becomes associate captain."

John Hay Whitney fought back with an infusion of Tom Wolfe's and Jimmy Breslin's "new journalism," but the paper folded in 1966.

Press historians bemoan its passing, yet miss what made the Trib truly

great, says Bovee, a journalism professor at Marquette University. That was Greeley's insistence on the media's "social responsibility."

While Greeley scorned "the peculiar Bostonian notion . . . that a paper should [not be] interesting," he also rejected the "pure libertarianism" of big day. That is preliment to the peculiar beginning to the peculiar b his day. That is, unlike other editors in his highly partisan age, he aired opposing views—not, he said, "as their adversaries understand or state them, but as they are stated by their champions." Thus, on the Erie Canal question (to build or not) in 1852, the Trib featured its competition's editorials—then berated the papers for not doing the same: "Our readers have seen both sides, why not yours?" In 1857, Greeley urged readers to study key pro-and-con arguments on the *Dred Scott* decision. In 1858, startled Trib readers found an editorial from the Philadelphia Southern Monitor calling for resumption of the African slave trade.

Greeley's commitment to what Bovee calls the "forum function of the press" cost him subscribers and taxed his forebearance (he was an ardent abolitionist). But in steering between what he called "servile partisanship" and "gagged, mincing neutrality," he was way ahead of his time. In 1947, a

PRESS & TELEVISION

private Commission on Freedom of the Press, sponsored by publisher Henry Luce and educator Robert M. Hutchins, warned that editors do not "enjoy the privilege" of being "deaf to ideas," and emphasized fairness. Today's Op Ed pages reflect that concern.

The 18th-century French writer, Voltaire, reportedly said: "I disapprove of what you say, but I will defend to the death your right to say it."

Greeley too took that view—but, of course, considered others.

Britain's Pirates

"Pirate Radio in Britain: A Programming Alternative" by Douglas A. Boyd, in *Journal of Communications* (Spring 1986), Annenberg School of Communications, Univ. of Pa., 3620 Walnut St., Philadelphia, Pa. 19104–3858.

The day before Easter, 1964: Disc jockeys on the vessel *Mi Amigo*, afloat in international waters southeast of England, began airing pop tunes.

The unlicensed "Radio Caroline" dazzled London-area listeners. Within

The unlicensed "Radio Caroline" dazzled London-area listeners. Within three years, 11 other "pirate" stations were broadcasting from ships and offshore World War II anti-aircraft gun platforms.

Thus, writes Boyd, communications professor at the University of

Maryland, began Britain's battle with bootleg radio.

Familiar to northern European listeners (and irritated governments) since the late 1950s, radio pirates staked their claim in the United Kingdom by supplying what the British Broadcasting Corporation (BBC) proudly would not—rock 'n' roll and commercial advertising. London officials, determined that Britannia should rule its airwaves, were incensed. The Italian and French governments would decide to sanction *their* countries' popular pirates; not the British. In 1967, over the protests of several M.P.s., Parliament passed a law providing for fines and/or jail for any citizens involved with the outlaw stations. Then the BBC introduced Radio One, a round-the-clock rock station; it featured lively, American-style deejays, some of whom had been lured from pirate radio ships to the BBC's plush London headquarters.

For a while, Boyd relates, unlicensed broadcasting all but ceased. Then gradually it returned—despite Parliament's 1972 move to permit indepen-

dent commercial stations to take ads and air Top 40 music.

Soon *land-based* pirate stations appeared, many catering to highly specialized audiences: the elderly, blue-collar workers, fans of black and reggae music, speakers of Urdu and Hindi. For its roughly 150,000 Greek Cypriot listeners, London Greek Radio aired *bazouki* music, religious ceremonies, and soap operas; Radio Jackie raised money for charity, located lost pets, and advertised jobs. By 1985, roughly 20 pirates were in business in the London area alone. A Gallup poll showed that the pioneering Radio Caroline had four million listeners.

Although committed to free enterprise, the Conservative Thatcher government has continued the war against piracy. It created the Radio Investigation Service, an agency empowered to seize unauthorized equipment without a court order. To date, the pirates have been hurt—Radio Jackie, London Greek Radio, and Asian-People's Radio have been raided—

but by no means silenced.

The moral of the radio drama, writes Boyd, quoting the *Economist*: Official attempts to shut down a desired service "are like parents trying to stop teenage parties. They always pop up somewhere else."

OWI's Lost Battle

"Blacks, Loyalty, and Motion Picture Propaganda in World War II" by Clayton R. Koppes and Gregory D. Black, in The Journal of American History (Sept. 1986), 112 North Bryan St., Bloomington, Ind. 47401.

In December 1941, the month Japan attacked Pearl Harbor, Horace Caton, a Chicago sociologist, wrote an article posing the question pondered by millions of his fellow black Americans: "Am I a negro first and . . . soldier second?" he wrote. "Or should I forget in any emergency [that] my first loyalty is to my race?" Asked in a 1942 Roosevelt administration survey how they would fare under Japanese rule, nearly half of the black respondents thought their lives would be no worse—or perhaps better.

Washington's Office of War Information (OWI), charged with "arousing mass support," had to win over blacks at a time when the armed services were still segregated, Jim Crow reigned in the South, and black civil defense volunteers could still find their applications filed under "Negro and Dead." OWI's first effort, a pamphlet called "Negroes and the War" that wrapped a thinly veiled "fight or else" message in a picture essay on

black "progress" in America, was a resounding flop.
As Koppes and Black, historians at Oberlin College and the University of Missouri, relate, the OWI turned to Hollywood—then churning out 500 movies a year—as the best place to push propaganda. Anthropologist Philleo Nash developed the OWI's working metaphor, "Uncle Sam's Family"—diverse but equal, having "a common stake in an Allied victory." A bureau was set up in Hollywood; OWI domestic director Wendell Willkie, and Walter White, the patient leader of the National Association for the Advancement of Colored People (NAACP), began meeting movie folk to urge the depiction of the Negro "as a normal human being."

The film studios' liberal-left creative types were receptive, but moguls like Sam ("If you want to send a message, call Western Union") Goldwyn preferred blacks for "pure entertainment." That, joked screenwriter Dalton Trumbo, meant "tart" daughters, "crapshooter" sons, "Uncle Tom"

fathers, and "grotesque" mothers.

OWI persuaded all the studios (except Paramount) to submit scripts for review. But the Office's first attempt at a change—in Tennessee Johnson, a 1942 Metro-Goldwyn-Mayer (MGM) Civil War film—failed. Rather than recast the pro-Confederacy plot, MGM simply cut out the blacks. With Cabin in the Sky and Stormy Weather, 1943 musicals starring Ethel Waters and Lena Horne, came another setback. OWI's Hollywood staff feared the films' "ignorant, superstitious" black stereotypes would rile the increasingly alienated NAACP. The OWI brass in Washington saw nothing offensive—but white Southern legislators did: all-black casts. Congress sliced the OWI film budget by 90 percent.

Soon, OWI's reformist zeal flagged; it began merely suggesting that

PRESS & TELEVISION

Negroes be "sprinkled" into crowd scenes. The Office's Hollywood venture confirmed blacks' suspicion that "Uncle Sam's Family" was essentially white. Had OWI done more to retain the support of moderate black groups like the NAACP, contend the authors, a different picture would have been coming to U.S. theaters.

RELIGION & PHILOSOPHY

An Agnostic's Lessons on God

"Heidegger and His Origins: Theological Perspectives" by Thomas F. O'Meara, in *Theological Studies* (June 1986), Theological Studies, Inc., 428 East Preston St., Baltimore, Md. 21202

What does it mean—for someone, or something—"to be?"

Not the sort of question one expects to overhear in an office elevator. But grappling with this very query in his first book, *Being and Time* (1927), brought German philosopher Martin Heidegger (1889–1976) from obscurity to what was then the intellectual forefront: existentialism. It is a philosophy that rejects such notions as "divine purpose" and rejoices in individual responsibilities and freedoms.

Heidegger denied the existence of God, criticized the West's obsession with science, and scorned Christianity's "too rational" approach to the spirit. He maintained that modern man is so obsessed with achievement, with measuring himself against his peers, that he has lost touch with the simple "joy" of existence. Indeed, observes O'Meara, a University of Notre Dame theologian, Heidegger saw men as absorbed with "things" and petty cares, each in his private world, numb to the sense of participating in a larger universe.

Ironically, he wrote, only when this life of self-absorption culminates in a bitter *Angst* (anxiety) and a pinch of mortality do men feel a shock of

pleasure—an intense awareness of their own "Being."

His ideas were heretical; yet such heresy was not bred into him. The son of a local sexton, Heidegger grew up in the Black Forest town of Messkirch, which was heavily Roman Catholic. Educated by Jesuits, he aspired to the priesthood. At the University of Freiburg, he became enamored of medieval Christian mysticism; he found the simple "awe" of God in the works of 13th-century Franciscan theologian Duns Scotus and 14th-century Dominican Meister Eckhart overpowering. But, by his early 30s, Heidegger's views changed. He was deeply affected by attacks on Scholasticism in the writings of 19th-century philosophers Søren Kierkegaard and Friedrich Nietzsche, and by his mentor, philosopher Edmund Husserl. He abandoned Christianity's "analysis of existence" for what he called a "presence of Being."

While O'Meara concedes that "Heidegger was not a major thinker on God or the Christian faith," he nevertheless believes that theologians have much to learn from the agnostic philosopher. In today's seminaries, sterile textual analysis has superseded the quest for a divine *spark*. The mystical

RELIGION & PHILOSOPHY

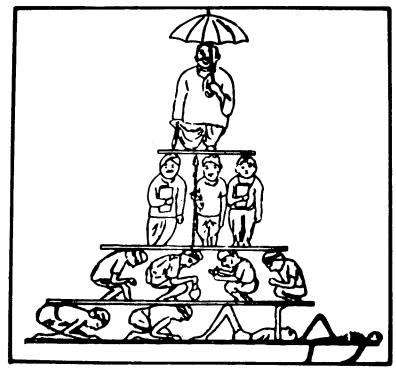
joy Heidegger so admired in the medieval Scholastics has drifted away. O'Meara warns that "any tradition which intends to survive in the world beyond the seminar and the library cannot live solely by words—no matter how sacred the text." Nor can anyone enjoy spiritual growth without the kind of insights Heidegger came to *outside of* religion.

India's 'Downtrodden'

"Castaways of Caste" by Jayashree B. Gokhale, in *Natural History* (Oct. 1986), Central Park West at 79th St., New York, N.Y. 10024.

Although India's 1949 constitution granted equal rights to all citizens, the dominant Hindu religion's rigid caste system endured. And so, too, did the miseries of the lowest caste—the Harijan or "untouchables"—even after a 1955 law provided tough penalties for Indians who bar them from religious, social, or educational institutions.

Indeed, observes Gokhale, a visiting research scholar at the University of Pennsylvania, the curse of caste has clung to those Indians, now numbering in the millions, who have sought to leave the life of a Harijan by



A depiction of the Hindu social castes by dalit artist Gobi David. A Brahmin priest or scholar stands atop warriors and merchants, who in turn are borne by laborers and peasants. At bottom: untouchables.

RELIGION & PHILOSOPHY

converting to Buddhism.

The Hindu caste system, developed over 30 centuries, assigns society's "unclean" tasks (e.g., disposing of animal carcasses, tending funeral pyres, collecting garbage) to the untouchables. Born as Harijan, forced to live on the outskirts of town, and entirely dependent upon state largesse and contributions of grain from higher-caste townsmen, these wretched beggars lived with only the hope that "obedience and sublime faith" might raise their caste in the next life.

Then, in 1956, Dr. B. R. Ambedkar—the first Harijan allowed to go through the Indian educational system—led a half-million joyful untouchables from Maharashtra, his native state, in a mass conversion to Buddhism. It was, he said, like "walking away from hell."

Many more have followed since; in Maharashtra alone, there are five million converted Buddhists. Yet conversion has proved no panacea.

Loyal Hindus viewed the Buddhist converts as traitors and troublemakers. Community relations went from bad to worse as tasks suddenly spurned by former untouchables fell to other low-caste Hindus, the Mangs and Chambhars. And when the new Buddhists sought to keep the few privileges accorded untouchables, such as a quota of places in schools, they were reviled, says Gokhale, for trying to "have their cake and eat it too."

In recent years, the converts have been victims of arson, rape, and public beatings. In one village, Hindus with nightsticks attacked a group of Buddhists for trying to draw water from a communal well after the untouchables' well ran dry; in a suburb of supposedly cosmopolitan Bombay, a Hindu mob ravaged a Buddhist neighborhood. During 1986, caste riots broke out in two states. Anti-Buddhist violence does not seem of great concern to India's rural police and civil servants, whose ranks, Gokhale notes, are "overwhelmingly" composed of caste Hindus.

The ex-untouchables—who call themselves dalits, the "downtrod-

The ex-untouchables—who call themselves *dalits*, the "downtrod-den"—have carved out a political and religious identity outside mainstream Indian society, rather as U.S. black Muslims did during the 1960s. *Dalit* writings, often angry and obscene, deride Hindu gods and superstitions—or, more positively, celebrate a certain pride. "I am a Buddhist now," wrote one recent convert. "I have become a human being."

SCIENCE & TECHNOLOGY

Squaring the Age Curve

"Biochemical Studies of Aging" by Morton Rothstein, in *Chemical and Engineering News* (Aug. 1986), 1155 16th St. N.W., Washington, D.C. 20036.

At the beginning of the century, the U.S. population's median age was 24 years, and average life expectancy was 47. Today, the median age is 31.5 (it will be 39 by 2010) and life expectancy is over 70. While senior citizens become ever more numerous, what Rothstein, a biochemist at the State University of New York in Buffalo, calls the medical "ideal" remains elusive—"to reach a very old age in excellent health and then die quickly."

SCIENCE & TECHNOLOGY

Until recently, notes Rothstein, that ideal—gerontologists call it "squaring off the age curve"—received little taxpayer support. In 1973, for instance, federal contributions to cancer research amounted to about \$2 for every U.S. citizen, versus only three cents for studies on aging. But since then, federal support for such studies has grown more than sixfold, to some \$150 million per year. The hope is that researchers can learn enough about the causes and treatments of age-related disease in time to reduce the next geriatric generation's incidence of traumatic terminal illness or debilitating diseases such as Alzheimer's.

So far, scientists have yet to unlock the cellular and molecular keys to healthy longevity. Study of the aging process continues on many paths, such as the theory that the wanderings of "free radicals"—tiny bits of jetsam left in cells as by-products of cell metabolism—wreak cumulative damage on the heart and nervous system. While this and other natural phenomena probably contribute to aging, says Rothstein, "a more central

cause" remains to be found.

It appears likely that diet can dramatically affect longevity, though at present there is no consensus on how it actually works. University of Texas researchers found that rats live 50 percent longer when their caloric intake is reduced by 60 percent (which would seem to correlate with the fact that certain mountain folk, such as the Hunza on the Sino-Pakistani border, live much longer than the average American on 1,000 fewer calories per day). Then again, studies at Baltimore's Gerontology Research Center have determined that, for middle-aged and older people, somewhat higher weights than those in the standard "ideal weight" tables would help foster a long and healthy life.

At present, Rothstein observes, "the odds of a major breakthrough" in squaring the aging curve are those of "a million-dollar lottery." All the more reason, he argues, to buy "lots of tickets"—i.e. continue supporting

a wide range of investigations.

How Music Made Time

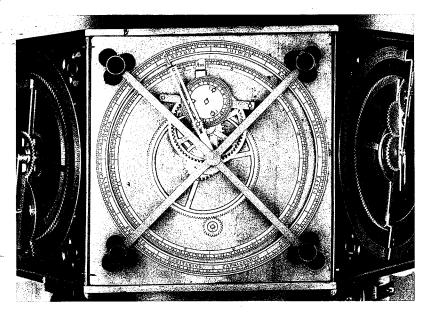
"The Origin of Time" by Geza Szamosi, in *The Sciences* (Sept./Oct. 1986), New York Academy of Sciences, 2 East 63rd St., New York, N.Y. 10021.

Historian C. P. Snow, who bemoaned the contemporary split between the humanities and the sciences in *The Two Cultures* (1959), might have buttressed his argument with an account of how science and music merged

in medieval days to create the modern concept of time.

As Szamosi, a professor of physics at the University of Windsor, Ontario, points out, the ancients, who did not need to measure time exactly, had very vague notions of it. Plato held that time was a product of motion, governed by the sun and the planets; Aristotle conceived of time as variable, like the seasons and the human heartbeat. Such views held sway right through the Middle Ages. When clocks first appeared in the West during the 14th century, prominent dials represented the movements of the seven known planets; a small one told the time, with little precision.

SCIENCE & TECHNOLOGY



Medieval clockmakers had scant interest in the time. Here, a reproduction of the De 'Dondi Astronomical Clock (circa 1364), used to measure lunar cycles.

As late as the 1630s, when Galileo conducted his first experiments with time—including, it is said, attempts to measure how long it took cannonballs to drop to the ground from the tower of Pisa—most people reckoned time in terms of natural events such as the harvest or the cycles of the moon. Only music employed metric time.

The subtle polyphonic melodies of the early medieval Roman Catholic Gregorian chant, and the 12th-century style of singing known as melismatic organum (in which the durations of two sets of simultaneous notes remained constant while the melodies diverged), required careful temporal organization; intervals between notes had to be divided into equal or unequal parts and arranged in clearly defined relationships. Then, during the 14th century, musicians at the Notre Dame school in Paris developed a ground-breaking notation system of rhythmic modes, the precursors to the modern system (whole tones, quarter tones, etc.). Although primitive by today's standards, Notre Dame notation represented the first symbolic manipulation of measured time "independent of motion and detached from the environment."

Notre Dame's musicians were not motivated by scientific or philosophical goals. But they would soon benefit science and philosophy as much as art: Galileo's ideas undoubtedly related to the musical training he received from his father, a pioneer in new musical styles.

Today we are comfortable with, say, the idea that the Earth revolves around the sun once every 31,556,925.9747 seconds. But this perceptual ease does not come naturally. As Szamosi observes, until roughly age nine,

SCIENCE & TECHNOLOGY

children's temporal judgments amount to little more than disguised spatial judgments. "20th-century children are instinctive Aristotelians," he says. Like medieval man, they perceive the passage of time as the rhythm of their own concerns.

The Brain's Maps

"Neural Darwinism: A New Approach to Memory and Perception" by Israel Rosenfield, in *The New York Review of Books* (Oct. 9, 1986), 250 West 57th St., New York, N.Y. 10107.

Why do people remember a joke they heard in second grade, yet forget the howler they heard yesterday? Sigmund Freud viewed memory as a permanent record of past occurrences; but the record was unreliable, he thought, because emotionally charged events could be repressed.

Today, specialists do not believe that memories form a fixed record in the brain. But they underestimate the role of individual psychology in memory and perception, according to Rosenfield, a history professor at the John Jay College of Criminal Justice in New York City. It is our "individual needs and desires" that determine how we recall people and events

Jöhn Jay College of Criminal Justice in New York City. It is our "individual needs and desires" that determine how we recall people and events.

Charles Darwin observed that the "typical" qualities we associate with humans and other animals are abstractions that conceal their true natures: biologically varied, genetically diverse, selected by the ability to survive difficult environments. If Darwin's theory of evolution holds, says Rosenfield, then Nobel Prize—winning neurophysicist Gerald Edelman has an intriguing explanation of memory's idiosyncrasies.

In 1978, Edelman suggested that the brain may be seen as a Darwinian system evolving through variation and selection. His task was to determine how, given a particular set of genes, enough variability could survive within the brain's overall structure. Early embryonic development provided Edelman with an answer. Studies of individual cells revealed that genes alone did not control their destinies; rather, they became liver cells, nerve cells, brain cells, or whatever, depending on where they were when specialization began. Thus brain function (and structure) appeared to depend on the activities of neighboring cells, as well as on the individual characteristics of the cells themselves.

Edelman's "neuronal group selection" theory holds that, in humans, groups of brain cells compete to record different sensations. For example, a man in a concert hall might hear someone say "nine o'clock," and recall a past nine o'clock event. One set of brain "maps" would locate the speaker while another enabled him to continue hearing the music. Months later, the man might have again forgotten the hour but suddenly recall it by humming the concert melody. His memory did not function by repeating past images; rather, the brain "recategorized" information when its mapping system was activated in another highly individual context.

Just as Albert Einstein replaced Sir Isaac Newton's theories with a larger view of space and time, Rosenfield argues, Edelman's ideas may yield a "deeper view of human psychology." At the very least, he says, neural Darwinism "challenges those who claim that science... is little concerned with the unique attributes of individuals."

Biological Crock

"Age and Infertility" by Jane Menken, James Trussell, and Ulla Larsen, in Science (Sept. 26, 1986), 1333 H St. N.W., Washington, D.C.

Is infertility among women on the rise?

To judge by the number of physicians specializing in fertility problems, and the media's attention to the matter, inability to bear children is a spreading phenomenon, particularly for career women who delay starting a family until their 30s. Indeed, a widely noted 1982 French study showed alarming proportions of women unable to conceive by the end of 12 "insemination cycles," or one year—26 percent of those below age 30, 35 percent in the 30-34 age group, and 44 percent of those between ages 35 and 39. The message: Increasingly, women who wait risk waiting forever.

Nonsense, say Menken and Trussell, professors of sociology and eco-

nomics at Princeton, and Larsen, a researcher at Sweden's Lunds University. Among other flaws in the French study, they note, was its one-year standard. That is too short: Research has shown that the mean time required for conception is about eight months, and that at least 14 percent of

women who become pregnant take more than a year to do so.

While ability to bear children does decline with advancing age, the rate of decline has remained roughly stable since 1965. The chance of a woman not being able to bear a child rises from about five percent for those aged 20 to 24 to 16 percent at most for those aged 30 to 35. In later years, the proportion of women who cannot conceive does rise sharply—to 30 per-

cent by age 40, and 60 percent by age 44.

Why has fear of infertility risen? The authors think that the effectiveness of fertility control-which in 20 years has lowered the rate of unwanted births in the United States from above 20 percent to below seven percent—has led people to believe, mistakenly, that "controlling fertility was the real problem" and that "having children is easy."

For women of childbearing age who suspect infertility, the authors

prescribe patience and persistence. One study has shown that 41 percent of such women who obtained professional treatment subsequently became pregnant. But so did 35 percent of the women who did not.

RESOURCES & ENVIRONMENT

A Safe Dose?

"The Microwave Problem" by Kenneth R. Foster and Arther W. Guy, in Scientific American (Sept. 1986), 415 Madison Ave., New York, N.Y. 10017.

Microwaves are everywhere. Occupying a band of the electromagnetic spectrum between radio signals and visible light, they emanate from such common sources as air traffic control systems, police and military radar, earth-to-satellite television broadcasting equipment, telephone lines, medical devices—and, of course, microwave ovens.

At high levels of intensity, the kind one endures while standing near a

RESOURCES & ENVIRONMENT

big TV transmitter, microwaves are clearly dangerous; they cause animal (including human) tissues to overheat and, in some cases, to develop tumors. But what about low-level exposure, such as the microwave bathing someone gets when he walks under overhead power lines, or cooks with a microwave oven? After 6,000 studies over 40 years, such exposure has not been proved to be risk-free. But while a few studies have found links to changes in the brain, blood, heart, and immune system, as well as to chromosome damage and cancer, most researchers have found no danger, observe Foster and Guy, biophysicists at the Universities of Pennsylvania and Washington.

Although physicians have used microwaves for heat therapy (i.e. diathermy) to loosen up stiff backs and to ease the pain of arthritis since the 1950s, they largely ignored the possible side effects. Then the U.S. military (particularly the Navy) began testing the biological effects of radar, invented during World War II. In 1953, a University of Pennsylvania researcher proposed a limit on human microwave exposure—a level onetenth as intense as that of bright sunlight, or 100 watts per square meter of flesh; it was not until 1966 that Washington recognized this standard, on the recommendation of the American National Standards Institute (ANSI),

a private advisory organization.

By 1982, better methods of measuring energy absorbed by the body prompted ANSI to set more precise limits for exposure to high-intensity sources such as large antennae and military radars. Determined by calculations involving such factors as the position of people relative to the microwave source, the new limits are intended to ensure an energy dose that

heats the body more slowly than does moderate exercise.

Still, doubts about such "safe" limits persist. Some recent U.S. experiments have produced disturbing results. One study has suggested that the "microwave auditory effect" (the "clicks" that people sometimes hear when exposed to microwave pulses) is due to vibrations within the brain. Another investigation has raised the possibility that microwaves cause tumors in rats.

So far, however, neither recent federally funded research (\$10 million per annum) nor a review of the basic studies has convinced the authors that low-level microwave radiation will hurt anyone.

Zoning Out Ozone

"The Ozone Deadline" by Rochelle L. Stanfield, in National Journal (Sept. 13, 1986), 1730 M St. N.W., Washington, D.C. 20036.

It is just a colorless, odorless gas, and a natural one too. And in its proper place, the upper stratosphere, it is beneficial: Ozone shields the Earth's inhabitants from the sun's ultraviolet rays.

Environmentalists have long worried that the ozone layer aloft is being thinned out by certain gases used in aerosols drifting up from the ground. Now, observes Stanfield, a National Journal reporter, specialists at the U.S. Environmental Protection Agency (EPA) are concerned about too much ozone at the Earth's surface.

Ozone forms in the surface air when hydrocarbons (e.g., gasoline vapors and paint fumes) combine with nitrogen oxide spewed out of smoke-

RESOURCES & ENVIRONMENT

stacks and auto tail pipes; weather and other factors play roles that are not yet fully understood. What has become clear is that high concentrations of ozone can cause chest pains, eye problems, and headaches; prolonged exposure may permanently damage lung tissue. And plants, observes Stanfield, are at even greater risk than people. In studies on California's southern coast and in the San Bernardino Mountains, researchers have found that high ozone levels have reduced yields of tomatoes by 33 percent, beans by 26 percent, and tree growth by as much as 67 percent.

Surface ozone, in short, is more harmful than was thought when Congress passed the Clean Air Act of 1977, which mandates reducing the gas to a maximum level (0.12 parts per million parts of air) by December 31, 1987. But even that goal is distant: At least 73 U.S. regions, encompassing 80 million people, will probably miss the deadline. Los Angeles has levels triple the federal limit; in the New York City–Connecticut vicinity and in

Houston, the levels are roughly double the maximum.

Although ozone's components have many sources, motor vehicles and industry generate more than 70 percent of the hydrocarbons, which makes them prime targets for regulation. But any fix will be expensive; thus the oil companies want Detroit to outfit its cars with vapor-capturing canisters (cost: \$30-\$150 each), and the automakers argue that all gas pumps should have fume-recovering hoses and nozzles, costing filling station operators \$12,000 to install and \$2,000 a year to maintain.

The Clean Air Act empowers the EPA to penalize areas that fail to meet the ozone limits with a cutoff of federal highway aid and a ban on construction projects. But Stanfield doubts that the EPA will take those tough steps, since some progress is evident. Nationally, ozone levels declined seven percent between 1979 and 1984.

ARTS & LETTERS

Explaining Hitchcock

"Personality, Pathology, and the Act of Creation: The Case of Alfred Hitchcock" by Stanton Peele, in *Biography* (No. 3, 1986), Dept. of English, Univ. of Hawaii, Honolulu, Hawaii 96822.

Gulls attack humans (*The Birds*, 1963); a mad motel-keeper stabs a woman in the shower (*Psycho*, 1960); a husband hurls his wife from a church belfry (*Vertigo*, 1958).

Such unsettling images, arising out of one man's bizarre imagination, made Alfred Hitchcock (1899–1980) the master of the macabre. The London-born director's gruesome style has also led some film critics to view his work as pathological. In The Dark Side of Genius: The Life of Alfred Hitchcock (1983), Donald Spoto went so far as to call this producer of 53 feature-length films a man gripped by misogyny, sadism, and fetishes concerning the bathroom and other matters involving the body and sex. "Hitch," born to poor Catholic Cockney parents, was seriously maladjusted, to the detriment of his art.

ARTS & LETTERS

Peele, a social psychologist and critic, rejects this notion. He acknowledges Hitchcock's weaknesses—obesity, alcoholism, incessant loneliness despite a 54-year marriage, an obsession with blonde ice-queens like Tippi Hedren of *The Birds* and *Marnie* (1964), who spurned his affections. But, Peele maintains, his films "cannot... be regarded as elaborate excuses for their director's foibles and deficiencies, as uninhibited vicarious indulgences of Hitchcock's hidden yearnings." Rather, Hitchcock "transformed" his compulsions into great cinematic visions. If anything, his ob-

sessions helped give his work its seemingly timeless popularity.

While one can easily harp on the vicious murders in, say, Vertigo, Psycho, and Frenzy (1972), a film such as Rear Window (1954)—about an invalid photographer who uncovers a murder while peeping into a neighbor's apartment window with binoculars—reflects a certain "moral tension," says Peele. Voyeurism is exonerated in the name of justice. Moreover, while Hitchcock portrayed rape and murder, "he never did so in the easy way of most contemporary films that might be thought to encourage the behavior." He stressed the brutality and consequences of violence. Thus Marnie emphasized the horror of rape, via the desolation of the heroine (Tippie Hedren), who attempts suicide.

To reduce Hitchcock's brilliance to his neuroses, Peele insists, is mistaken. "Indeed, the ability to separate one's personality from one's creation may be the hallmark of the successful artist, the failure to do so the

sign of artistic mediocrity.'



Alfred Hitchcock appeared briefly in his films—as he does here, eyeing Jane Wyman, in the 1950 thriller Stage Fright-just because it amused him and his audiences. Said he: "I practice absurdity quite religiously."

ARTS & LETTERS

Houdini's Magic

"The Case of Harry Houdini" by Daniel Mark Epstein, in *The New Criterion*, 850 Seventh Ave., New York, N.Y. 10019.

It has been 60 years since Hungarian magician Harry Houdini, born Erik Weisz in Budapest in 1874, escaped from manacles inside a lead-weighted packing case—nailed shut and dropped into Manhattan's East River. But this and many of his other spectacular feats remain unexplained. And, notes Epstein, a poet, those feats were not exaggerated: Houdini's escapes were "more public than the proceedings of Congress, and most of them he

performed over and over, so no one would miss the point."

He got out of the world's most secure prisons. He wrestled free while being hung upside down from the tallest buildings in America in a strait-jacket. He was sewn into a huge football and into the belly of a dead whale. In California, buried six feet underground, he clawed his way out. During 19 weeks of performances at New York City's Hippodrome, an elephant was marched into an onstage cabinet from which Houdini made the pachyderm disappear by means still unknown. In London, before a house of 4,000, he picked open the supposedly tamperproof "Mirror Handcuffs" a local blacksmith had been preparing for five years. The list goes on.

Houdini died in Detroit of appendicitis on Halloween, 1926. The rabbi who spoke at his funeral, a close confidante, remarked that he possessed "a wondrous power that he never understood." Houdini's friend, Sir Arthur Conan Doyle, agreed that certain of his escapes were "supernatural." Houdini's wife, Bess, recalled in a letter to Doyle that sometimes she had urged her husband to call on "Spiritism" when he appeared stuck during a particularly tough escape trick, after which he would soon spring free.

Houdini himself categorically denied that any of his effects were achieved by supernatural means; he even crusaded against mediums and clairvoyants. Probably, concedes Epstein, he was telling the truth as he saw it. For as the obedient son of a Budapest rabbi, Houdini knew that Talmudic law strictly forbade the performance of miracles. And Houdini was nothing if not strict about both his faith and his craft

was nothing if not strict about both his faith and his craft.

Did he possess "psychic powers," as his wife, tantalizingly, both suggested and denied? For his part, Epstein can only conclude that "Houdini's work was no more miraculous than his life. His life was no more miracu-

lous than the opening and closing of a flower."

The Grand Pianist

"The Pilgrim Pianist" by Sanford Schwartz, in *The New Republic* (Sept. 1, 1986), 1220 19th St. N.W., Washington, D.C. 20036.

Glenn Gould, the renowned Canadian pianist who died of a stroke in 1982 at age 50, earned well-deserved praise for bringing new vigor to the tired classical canon of Bach, Mozart, Haydn, and Beethoven. His interpretations were modern and questioning: Each restless performance challenged the great composers to prove their genius in a different way.

At the same time, writes Schwartz, an art critic, Gould's public performances seemed those of an eccentric brat. He used the sawed-off chair his

ARTS & LETTERS

father had made for him as a prodigy who graduated from Toronto's Royal Conservatory at age 13. He played with shoes off, wearing mitts and a sweater that poked out under his dress shirt (he dreaded catching cold). Humming uncontrollably, his piano often cluttered with medicines, water glasses, or a magazine (for those boring moments in a concerto between piano parts), the maverick with the surly matinee-idol looks struck his swooning public as a Brando-like musical Bad Boy. A bachelor recluse, he slept by day and worked at night, keeping in touch with the world through telephone calls (by which he made friends he never met).

But Gould's rebellion ran even deeper than his fans realized, reflects Schwartz. As shown by memoirs by and about him—The Glenn Gould Reader (1984), Glenn Gould Variations: By Himself & His Friends (1986), and Conversations with Glenn Gould (1986)—he worked hard at not being a rebel. When we hear his "coiled, passionate" playing, Schwartz writes, we may think it "willful" or "unreal." What we are actually hearing is a man engaged in the very serious business of trying "to deny the most

urgent part of himself."

At 31, Gould quit the concert stage, saying that the live circuit, which generally makes a performer repeat "concert favorites," drained him of his freshness. He began to argue against music's star system; technology, he said, would soon allow listeners to make "ideal" symphonies at home by splicing together parts of several performances. Of course, the irony of what Schwartz calls Gould's intensifying "quest for an anonymous, egoless performer's art" was that Gould was monumentally self-obsessed. He became what he most despised: "a Napoleonic creator, a man with little connection to his fellows."

Yet the playing remained exquisite, a constant counterpoint to the "tragic absurdity of a great artist's saying that he doesn't want to be an artist." And perhaps it was precisely Gould's self-sabotage—one might better call it self-sacrifice, muses Schwartz—that gave his Bach preludes such intensity and made them so affectingly his own. The late British poet Philip Larkin once remarked that deprivation was for him what daffodils

were for Wordsworth. Glenn Gould might have said the same.

OTHER NATIONS

Troubles Down Under

"Australia's New Tack" by Louis Kraar, in Fortune (Oct. 27, 1986), Time & Life Bldg., Rockefeller Ctr., New York, N.Y. 10020–1393.

One thousand miles south of the equator, washed by both the Indian and Pacific oceans, Australia (like New Zealand) is a Western oasis in the East.

In this tranquil Commonwealth of 16,000,000 people, the passions are sports, beer (31 gallons downed per person per year), and gambling (on which more is spent than for defense). In bad times, notes Kraar, a *Fortune* editor, Australians say, "She'll be right, mate"—things will work out.

But lately, says Kraar, Australians are less sanguine.

OTHER NATIONS

Despite all the current hoopla over the America's Cup sailing contest in Perth, which may generate \$150 million in income, the national economy is weak. A sag in world prices for wool, wheat, meat, metals, and bauxite-Australia's main exports-has led to an \$8.3 billion trade deficit. Australia's dollar has slipped as its foreign debt has mounted; at \$52 billion, the debt equals 37 percent of the gross national product.

In recent years, while subsidized farmers in other Western countries (including the United States) and Third World exporters of commodities were expanding their sales abroad, the Australians grew fat and lazy. Nearly 30 percent of the work force (versus 16.7 percent in the United States) is on various government payrolls. The welfare system supports not just the jobless and the poor-who are few, in a country with disposable income per capita of about \$5,700—but also "dole bludgers" (loafers) who sun and surf at taxpayer expense. Strong unions have organized nearly 60 percent of the work force; arbitrators fix labor contracts for all industries. Wildcat strikes abound, although most workers enjoy short hours, long annual vacations (four weeks), and a 17.5 percent annual bonus. Absenteeism, wasteful work rules, and featherbedding are endemic.

Arguing that an "age of realism" must begin, Prime Minister Robert Hawke, 56, has pressed unions for concessions and experimented with 'workfare" programs. But Hawke's Labor Party, in power since 1984, has suffered along with the economy. The leader of the opposition Liberals, John Howard, a conservative, calls for lower corporate taxes (now 60 percent) and breaks for management in labor contracts. His party may win

the upcoming elections, to be held by February 1988.

Kraar sees hopeful signs, notably Australians' new interest in ties with economically surging East Asia, "though many Aussies still identify more with Britain, 10,000 miles away, than with Indonesia, 300 miles away." And a new breed of risk-taking entrepreneurs is emerging in the manufac-

turing and financial fields.

An Australian comeback would surely please U.S. investors—such as General Motors, International Business Machines, and McDonald's-who have an \$8 billion stake there. But first, an Australian economist, John Mcleod, told Kraar, the mates must "wake up to the fact that they have been living in cloud cuckoo land."

Lenin's Mistake

"Worker Roots of Solidarity" by Roman Laba, in Problems of Communism (July/Aug. 1986), 301 4th St. S.W., Washington, D.C. 20547.

A joke is making the rounds in Poland these days: In the West, trade unions protect workers from their exploitative capitalist bosses; in the Soviet Bloc, unions protect Communist leaders from the workers.

So true, says Laba, a Fellow at Harvard's Russian Research Center. The short life of Solidarity, Poland's 100,000-member independent trade union-formed amid strikes in August 1980, outlawed 16 months later under martial law by the Gierek regime—was played out on a world stage. But Laba worries that Western observers, and even some Polish dissidents, missed the theme: They believe, as the official Soviet and Polish



A sardonic poster put out by Polish dissidents in 1981. The figure, a Stalinist-era Ideal Worker, is covered with epithets—"Anarchist," "Antisocialist Element," "Provocateur"—hurled by regime officials during labor uprisings in 1956, 1968, 1970, 1976, and 1980. The poster was issued in conjunction with the dedication in Poznan of a monument to workers killed in 1956.

line holds, that the revolt's "brain power" was the Committee for the Defense of Workers (KOR), a group of intellectuals founded in 1976 to defend Polish protestors from state prosecution—or that the Catholic Church's opposition to Communist rule laid the groundwork for Solidarity.

Actually, says Laba, contrary to the standard Leninist doctrine, which says that only an intelligentsia can run a revolution, KOR and the church were "auxiliaries rather than initiators" during Solidarity's brief flowering. Although Solidarity's leader Lech Walesa did work closely with KOR

Although Solidarity's leader Lech Walesa did work closely with KOR members, scattered worker groups were demanding reforms from the Gierek regime as early as December 1970. In the wake of protests over food price hikes in the Baltic coast cities of Gdansk, Gdynia, and Szczecin, blue-collar Poles began seeking numerous practical reforms. Studying thousands of demands issued by 403 worker groups between 1970 and 1980—culled from the archives of the Gdansk Solidarity group—Laba found that most sought pay raises and redress of such wrongs as the policy that (as printers in Stupsk protested) housing grants only go to "the state security forces and the militia." But the chief cry was for trade unions free of party, state, or factory control—which also headed the Gdansk 21 Demands of August 1980, the basis of Solidarity's charter.

Moreover, observes Laba, trade union support has mostly come from workers in heavy industry and construction, and, geographically, from the Baltic coast. There, working in places like the 30,000-employee Lenin Shipyard, reside many migrants from eastern Poland, who are keenly

aware of Soviet domination and fiercely nationalistic.

OTHER NATIONS

Lenin, Laba notes, felt that unions should merely be "transmission belts" of doctrine from party to people. In Poland, a message went from people to party; Solidarity's emergence conferred "a prima facie validity on worker grievances against their rulers.'

Sino-Soviet Amity?

"The End of Sino-Soviet Estrangement" by Steven I. Levine, in Current History (Sept. 1986), 3740 Creamery Rd., Furlong, Pa. 18925.

Since the founding of the People's Republic of China (PRC) in 1949, Beijing's relationship with Moscow has run the gamut: "eternal friendship" during the 1950s, "permanent enmity" during the 1960s and '70s.

Today, says Levine, an American University political scientist, relations between the two Communist colossi are slowly coming full circle.

Although the PRC opened its doors to the capitalist West during the late 1970s, it did not welcome the Soviet Union and Eastern Europe until 1982. But economic cooperation soon flourished between Beijing and the Kremlin. In December 1984, Soviet vice prime minister Ivan V. Arkhipov visited China to establish a Sino-Soviet Economic, Trade, Scientific and Technical Cooperation Commission—which convened last March—and to agree on doing \$14 billion worth of bilateral business during the 1986-1990 period. In July 1985, Arkhipov's Chinese counterpart, Yao Yilin, signed the economic agreements in Moscow.

As a result, the value of Sino-Soviet trade rose from roughly \$160 million in 1981 to \$1.9 billion in 1985; by 1990, it should reach \$6 billion, close to the present level of Sino-American trade. The Soviets tend to export heavy industrial products (e.g., electrical and transportation equipment, steel); the PRC ships, in addition to raw minerals, food and finished goods such as handicrafts and textiles—items much desired by Soviet consumers. Meanwhile, barter trade along the Sino-Soviet border has been revived. So has ship traffic between northeast China and eastern

Siberia along the Heilongjiang and Songjiang rivers. However, diplomatic progress between Beijing and Moscow has not been as smooth, Levine observes. To be sure, cultural avenues are now open: Soviet and Chinese artists, musicians, and athletes perform in each other's arenas, while more than 200 students from each nation attend the other's universities (up from 10 during 1983-84). But Beijing is hanging tough on its demands for removal of the "Three Obstacles": The Soviet troops on the Chinese border, the Soviet troops in Afghanistan, and Soviet support of Vietnam's occupation of Kampuchea. Despite more than a dozen high-level meetings between Chinese and Soviet officials between 1982 and 1986, Moscow has not budged on these demands; Beijing, in turn, has not allowed the Chinese Communist Party to restore formal ties with the Soviet Communist Party.

Because the PRC and the Soviet Union are still ardent competitors notably for influence in the Third World—Levine does not see them soon reaching a full accord. As Chinese vice prime minister Li Peng put it: "We hope that China and the Soviet Union will become good neighbors, but

they will not become allies,'