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The drive to map human genes could revolutionize medicine but also raises troubling ethical questions







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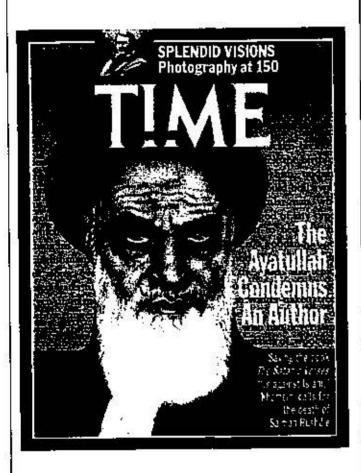
Creating value

Letters

THE AYATULLAH CONDEMNS AN AUTHOR

"Anyone who has ever had a single unauthorized thought should take this Rushdie matter seriously."

Helen Ermutlu, Atlanta



It is important that we learn the right lesson from the flap over Salman Rush-die's book *The Satanic Verses* [Feb. 27]. Censorship enforced by religious zealotry is reprehensible, whether it comes from bearded imams in flowing robes or evangelists in three-piece suits. The arrogance of a handful of clerics should in no way be used as an indictment of Islam, a great religion with a history spanning more than a thousand years.

Pat Sankaran Houston

I have read parts of this work, and they are appalling, demeaning, disgusting and gross, an abominable pack of lies. Surely everyone must have the right of free speech, but this does not mean we should abandon decency and respect or surrender integrity to achieve freedom.

Shameem Alikhan Katy, Texas

As a strong advocate of freedom of expression, I was stunned to see how my remarks were interpreted in your coverage of the Rushdie controversy. I support Rushdie's right to express himself artistically. Rushdie should not be punished, let alone killed, for his writing. My comments to your reporter were intended only to illustrate how some in the Muslim world feel about his book. They do not represent my personal views, and indeed are contrary to my beliefs.

Georges Sabagh, Director Center for Near Eastern Studies University of California, Los Angeles

Anyone who has ever had a single unauthorized thought should take this Rushdie matter seriously.

> Helen Ermutlu Atlanta

Under the literary cloak of dreams, Rushdie insults religious figures and takes a swipe at Islam. For centuries, Western commentators have hostilely denounced Islam. Muslims fear that when someone born in the faith does the same, earlier criticisms may appear vindicated.

> Fakhruddin Ahmed Princeton Junction, N.J.

Insulting religious beliefs of others is foolish. Murdering someone who does so is equally unwise. It is better to let Rush-die live and be cursed by fanatical Muslims than have him killed and the Muslim world cursed by all.

Abdolhossein Majid Kafa'l Ottawa

Khomeini is not doing anything un-Islamic. There is ample precedent for the Ayatullah to draw on in asking for the blood of Rushdie for his unflattering references to Muhammad.

> Jai Somanath Los Angeles

Khomeini is not God. Nor is he a prophet of God, as was Muhammad. The Ayatullah cannot punish or forgive. True Muslims must leave it to God to decide where punishment is due.

Nargis Lal Swanley, England

I am not a follower of Khomeini's, but I believe open blasphemy should be punishable by law. However, Islam will gain nothing by killing Rushdie and lose nothing by letting him live. This blasphemous book is not the first or the last to be written against Islam. It can do no harm.

Mostapha Mahmoud Cairo

Very few took note of this novel. Now, thanks to Khomeini, it is world famous.

Margareta du Rietz Höganäs, Sweden

"Raticide" in Boston

So Boston is going to get rat expert William B. Jackson to eliminate the rats under the city [Feb. 27]. This Pied Piper may have to deal with the state's "humaniacs." Having lost an attempt to hobble livestock farming in the state in '88 and now ineffectively battling trappers and furriers, they could home in on this planned "raticide."

Bill Fitzgerald, Chairman Massachusetts Dairy Committee Ashfield, Mass.

Rodents are common to many urban environments; however, Boston's is the first massive public works project aimed at preventing a rodent problem before it occurs. We see this as a unique opportunity to augment education and sanitation programs. The result: a significantly reduced rodent population in the next ten years and an unprecedented opportunity to combat a public health nuisance.

William V. Twomey, Project Director Central Artery/Third Harbor Tunnel Project Boston

Immigration Mess

Prepared or not, America should treat the refugees arriving from Central America with dignity and compassion [Feb. 27]. The fact that they are not U.S. citizens doesn't mean they have no human rights.

Benita J. Wolfe de Galván Brownsville, Texas

It's time to close the door. So long as there are unemployed or hungry and homeless Americans, we have no obligation to admit people from countries that overpopulate themselves into poverty. Some of those who claim to be refugees are only running away from their problems. If they want to live in a democracy, they should be willing to stay home and fight for one.

Kurt Bechle Sycamore, Ill.

Khomeini Backlash

TIME's readers responded vigorously with their views on the controversy surrounding *The Satanic Verses*. Of the 240 letters we received, 72% deplored Khomelni's position that author Salman Rushdie must be killed. The Ayatullah was supported by 17%, and 11% did not identify with either side of the dispute.

LETTERS TO THE EDITOR should be addressed to the nearest office: BONN - Godesberger Allee 127, D 5300 Bonn 2, West Germany LERUSALEM - 8 Rabbi Akiva Street, 94582 Jerusalem, Israel

PARIS - 17 Avenue Matignon, 75008 Paris, France

ROME - Via Sardegna 14, Rome 00187, Italy
Letters must include writer's full name, address and home telephone, and may be edited for clarity or space.

PRIVATE INVESTOR

TOP10 RISK AND REWARD

The Safe and Speculative Investments for 1989

How to get Offshore and Why

Saving on Credit

Inside Track on Market Trends







• MAKING THE MOST OF YOUR MONEY



with Fritz Rieder, Senior Vice President,

Swiss Bank Corporation and personal investment.

How private is your investment?

When you see how vast and impersonal the world of investment has become, the only "private" aspect sometimes seems to be that it's your money at stake. On the other hand, the most private and personal way of keeping your money is probably to stow it away under the mattress. You've got to strike a balance somewhere. And we have. Along with our international team of

investment counsellors, we've developed a wide range of investment vehicles for the private client (a selection of carefully selected funds, our own "cash bonds," fiduciary accounts, discretionary portfolios, and so on). So when you're making your own personal decision, you can also make

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TOP 10 FOR 1989

Safe Stocks and Wild Cards

Looking for security or keen to gamble on high growth – top portfolio managers make their selection

Deutschemark security

7 Then people look at Europe today they look at Germany" says Wolf Mantmerck, equities director of the Hamburg-based securities firm Warburg Brinckmann. "In addition to the interest from foreigners there has been an amazing increase in domestic institutional activity, particularly by pension funds. The outlook this year is much better for equities than for bonds because we expect no big movements in interest rates, and share prices have yet to reflect earnings prospects. Based on the 2.5% to 3% economic growth expected for this year, with inflation at 2% to 2.5% and the Deutschemark likely to be in the range 1.70 to 1.90 to the dollar, German equities are selling at less than 12 times their likely earning this year.

"The tax reform planned for next year will boost consumer spending and reduce corporate taxes.

"If you want a quiet assurance with your investments so that you can sleep easily at night, then the shares of the big chemical companies are for you: Bayer, Hoechst and, to a lesser extent, BASF.

"For speculation, look at KHD in the capital goods sector. It's a special recovery situation. Last year we had a financial upset when Deutsche Bank had to bail out Klepner, which had lost 750 million Dmarks on oil trading which went sour. Deutsche Bank covered the losses and took over Klepner for 1 Dmark. There is speculation on who will buy from Deutsche Bank the Klepner holding of 40% of KHD's share capital."

UK's soft landing

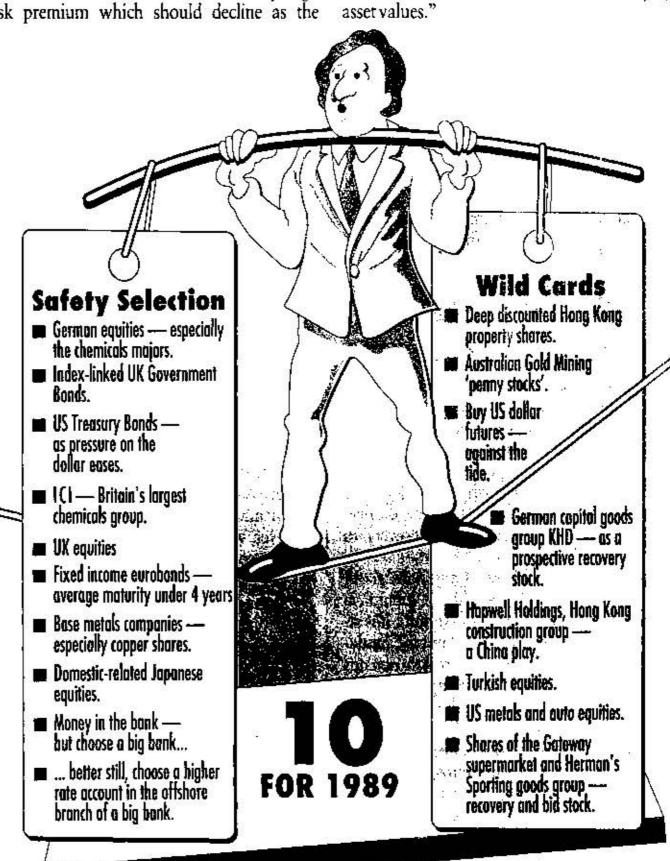
n the dark days just after October 1987, when most European and many American investment professionals Cassandra-like predicted a rerun of the 1929 Crash, the UK's largest investor thought differently. Prudential Corporation, the insurance and financial services conglomerate said equities were good value and the market would recover. What now?

Says investment manager Trevor Pullen: "For security I would opt for the UK equity market. A 'soft landing' for the UK economy over the next 12 months is highly likely given the policies currently being followed by Chancellor Lawson. Against this background, the market looks particularly attractive because its current valuation reflects an unusually high risk premium which should decline as the

economy slows and as trade and inflation pressures recede.

"However, in the short term we may have a bumpy ride."

In Pullen's view, "Hong Kong would be the wild card investment. The property sector dominates that market and property shares stand at near record discounts to underlying asset values."



1989 The Time Inc. Magazine Company

Going for copper

ritish pension funds are among the world's most internationally diversified, estimated to have about 15% of their portfolios invested outside the UK (compared with American pension funds, for instance, where the proportion is less than 5% and maybe as low as 3%). They likewise are more equity-minded than their American cousins, with 70% to 80% of their investments in shares whereas the US pension fund average is around 50%. The man who set that trend 30 years ago was George Ross Goobey, who demonstrated with the Imperial Tobacco Pension Fund, which he managed, superior returns to those achieved by the fixed-interestdominated portfolios of his peers.

Today, his son Alastair shows similar traits. As international investment strategist at James Capel - the stockbroking firm which, for each of the last ten years, has been rated best in investment research according to independent

surveys – he picks:

Phelps Dodge, "Because base metals is an area of extreme misvaluation on the world's

stock exchanges."

Hopewell Holdings in Hong Kong is the share Alastair Ross Goobey would choose for more speculative appeal. "It is a classic China Play in Hong Kong, where you are speculating against the political risk of what happens when China takes control of the British colony in 1997. The Hong Kong market is cheap anyway: the way things are going in China, they're not going to destroy the Hong Kong economy."

Nomura sticks to Tokyo

he world's largest stock market, Tokyo, continues to baffle most Western investment professionals. By American and European criteria of profits, dividends and cash flow, Japanese stocks were overvalued two or threefold before the October 1987 market crash, and Tokyo had been expected to lead a worldwide decline. Instead, Tokyo's Nikkei average powers to new highs.

"You can have all sorts of questions about the valuation," acknowledges Nobumitsu Kagami, managing director of Nomura Investment Management Company, "but the fundamentals are good. Economic growth remains strong, corporate profits are rising, inflation is being kept well under control, the trade surplus persists and interest rates are edging lower."

Foreign investors who had been scared out of Japanese shares by the stratospheric prices are only now rebuilding their previously minimal participation in this market, and Japan's own insurance companies, pension funds and mutual funds have still to raise the equity proportions of the portfolios to target levels.



JAMES CAPEL'S Alistair Ross Goobey.

"Base metals shares are extremely undervalued"

Nevertheless, "there is," he says, "no reason to believe that the valuation put upon those excellent fundamentals will fall. I would expect Tokyo to rise by about 10% this year."

As befits a leading officer at the world's largest, and Japan's most influential, securities firm, Nobumitsu Kagami declines to name specific stocks, either blue chip or speculative. He does unbend enough to suggest that investors in Japan would be most rewarded in 1989 by staying with domestic-related issues rather than the big international companies.

Pick a gold mine

hatever view the rest of the world's financial markets may take of his policies, British Chancellor of the Exchequer Nigel Lawson takes a dim view of the reviews he gets at home from stock market commentators. There is one stockbroker-critic, however, whom Mr Lawson has to treat with more respect, because Anthony Beaumont-



NOMURA'S Nobumitsu Kagami.

Dark is a Member of Parliament on the Government's side.

Given his stockbroking experience, what is he tipping for 1989? Characteristically, he deals the wild card first: "North Kalgurli (an Australian gold mine) at 13.5 pence a share."

"The shares are like option money without the time erosion of value – if gold comes right, the shares could rise fourfold and still look cheap. For real money at this time, I would put my money into those longer-dated UK government stocks which are index-linked."

Follow the "Belgian dentists"

The world's biggest securities market has no nationality and no trading floor. The amount of money moving around the Eurocurrency markets, particularly in Eurodollars, is counted in hundreds of billions, even trillions of dollars. The borrowers who raise money here range from the World Bank to large US corporations attracted by the comparatively low rates of interest they pay. Investors are willing to accept apparently inferior return because Eurobonds are issued in bearer form. They carry no names, and there are no registers of holders exposed to revenue officials.

Eurobond dealers have always recognized that tax evasion and avoidance of currency regulations are important elements in this market. The byword of the market is that the typical Eurobond investor - the wealthy professional person with unreported income to tuck out of sight – is 'the Belgian dentist.' Such a person also wants security of a more respect-

able kind: lack of risk.

In Belgium's own capital, Brussels, one of the most reputable securities firms is Deway, Sebille, Servais et Cie where director Andre Beier confirms that clients, whose funds of about \$1 billion he manages on a discretionary basis, are risk-averse. "We don't believe there will be a strong decrease in rates.

"Debt and bank problems which have appeared to lie dormant recently could come

back like a boomerang."

"With preservation of capital as the first priority, we have a policy of putting 40% of our funds into fixed income bonds with an average maturity of less than four years. We are reducing the proportion held in shares from 37% to 30% and the mirror image of that will be a rise in money market funds from 15% to 20%; real estate 5%, and the rest in gold coins.

"For our equity investments we favor Belgium itself and the hard currency countries of Europe, which means Germany, the Nether-

lands and Switzerland.

"On the other hand, if you want an exotic investment, then shares in Turkey are on very low valuations by world standards and will rise as the market opens up to foreigners."

Cash for safety

Investment analysts are like theater critics: they pronounce on the efforts of others without ever practising themselves. Very few of the investment analysts who comment scathingly on the competence of managements have any personal experience of running so much as a candy stall. Brian Marber is an exception: a professional investment advisor

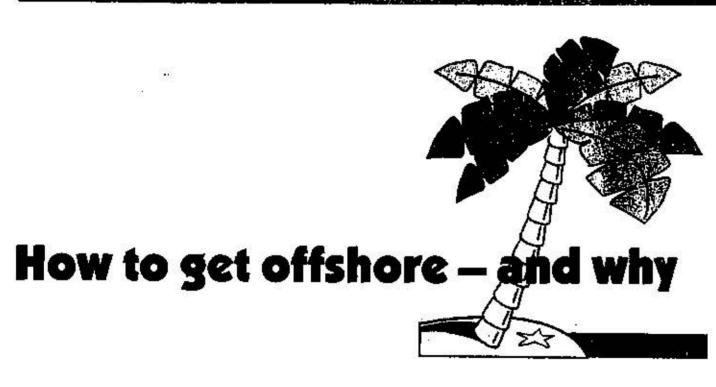
retained as a consultant by several of the UK's largest investment companies. "There is no investment with such absolute security that you can sleep easy of nights these days except money in the bank.

"The most rewarding wild shot is to buy the dollar."

But how does the ordinary mortal who isn't

a central banker or even chairman of a bank go about that in practice? "Sell one of the other major currencies for dollars in an IMM contract in Chicago. You contract to sell Deutschemarks, yen or pounds and receive dollars. My guess is that it would probably be best to sell the pound against the dollar."

John Roberts - from Europe's financial centers



derived from the wealthy that use their services, and from the scandals that occasionally dog their reputations. But the how and why of investing offshore is little different to those on shore. They are summed up by Monaco-based international tax advisor, Dr Barry Spitz: "Setting up a company or trust offshore only makes sense if there is a tax saving to be made at home and if such a move respects business and personal objectives."

The tax system operating in the investor's

country of residence is the key to whether a move offshore is worthwhile. An offshore center will not tax heavily the income or capital of funds placed there. But if the beneficiary of the funds is taxed on worldwide earned and investment income which is paid gross offshore, the income will still have to be declared to the home tax authority.

That is why expatriates are the prime users of offshore facilities, says Jain Castiau, Director of Hambro Fund Managers (Channel Islands). "These facilities allow expatriates

working abroad to build up their capital in a low-tax area while the retired expatriate takes the offshore route to draw a tax-free income."

As well as conferring tax benefits, offshore centers are also widely used for the establishment of trusts where the typical annual fee would be 0.75% of value. These legal entities can save the investor much administrative hassle. Justin Warren-Gash, Director of Marketing and Development at James Capel Channel Islands, points out that, "It makes good sense to set up a trust to hold an entire portfolio. By keeping the investments under one benign tax system, if an individual dies, the inheritors are not left to clear up a lot of tax and probate problems caused by widely scattered investments."

How much is enough?

Offshore is not limited to the mega-rich, argues lan Van-Straten, Investment Manager, International Clients, at Binder Hamlyn Investment Management. "There is no reason why an investor should not put as little as \$2,500-\$5,000 into a mutual fund managed offshore," he says, "although \$100,000 is needed to diversify funds round a number of markets. To get the best possible spread of risk requires an investment in a number of markets or funds."

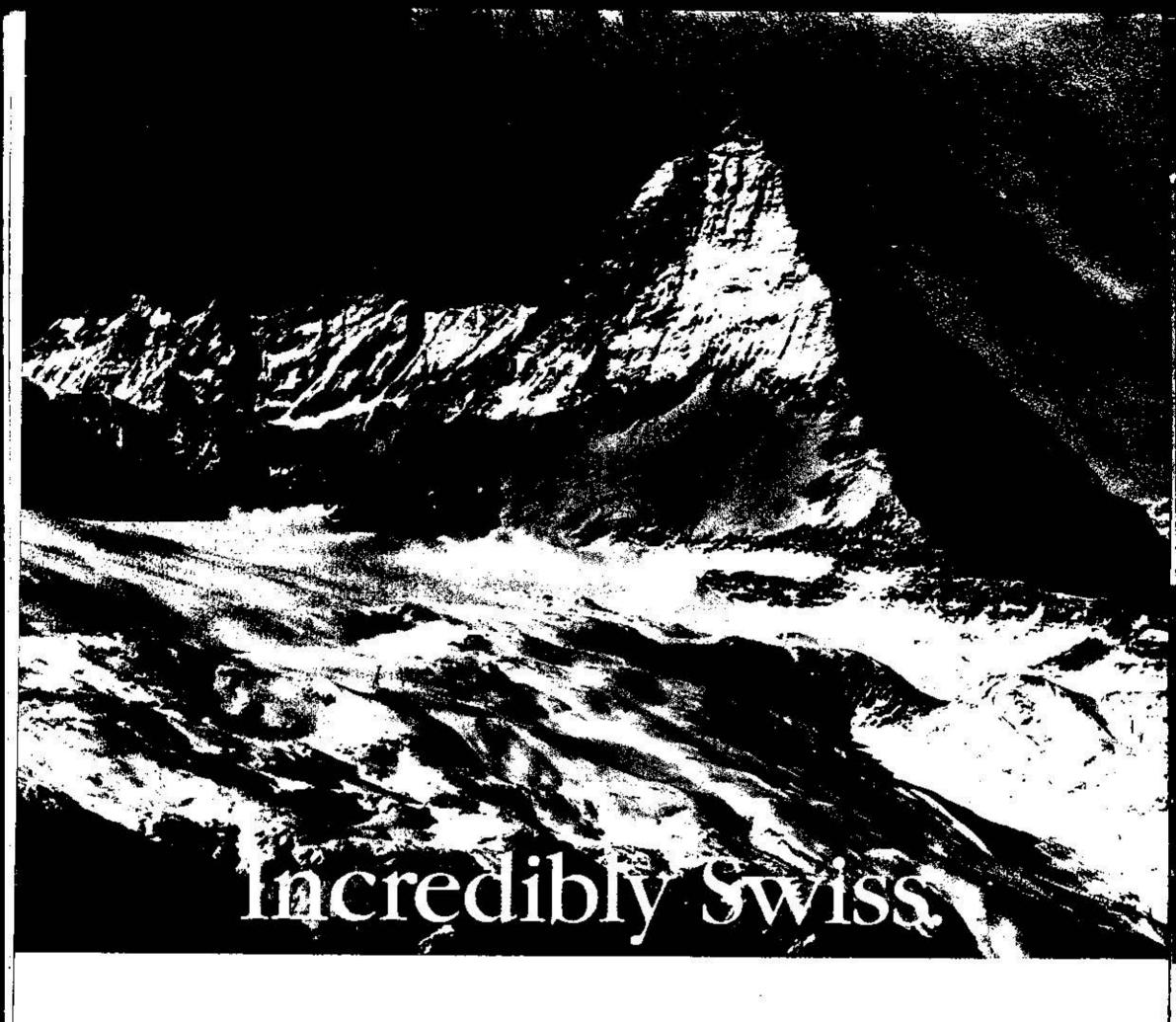
Nicholas Kochan-in Jersey

DO	 hire reputable and established advisors – lawyer and/or accountant. make clear the level of risk you want your funds subjected to. think long-term. Many of the best facilities offshore are for inheritance tax purposes not just immediate tax saving.
	4quiz your advisors hard about where your funds are going to be placed, and make sure you are happy with the answers.
DONT	1be persuaded into attempting anything which you are the least unhappy about on legal grounds.
ŝ	2go chasing small, little-known offshore locations, which may produce high rates of return one year followed by a coup, nationalization and expropriation in the next.

3put all your funds into one offshore fund if what you want is a steady

income to see you through your retirement.

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PERSONAL VIEW - Parisian élan meets a model investor



JEAN-LOUP SULITZER, 42-year-old with a share and property portfolio modestly estimated at \$14 to \$30 million. "Money that isn't made to work dies. It would be better to spend it. Profitable investment is simply a question of good sense."

Although he occasionally does listen to investment advice from others, Sulitzer remains his own chief advisor. "I don't say that I'm always right. Generally speaking, I should say that I'm wrong about a third of the time. But I find that most investment analysts are too late in what they say—they are constantly missing the train. And they tend to talk about whole areas as being attractive or not attractive for investment."

So what is Jean-Loup Sulitzer looking at in 1989? In France, the Bourse still offers some interesting opportunities, he says, despite having already risen by 56% last year.

There is also undervalued stock to be found

on the Swiss and German markets, Sulitzer says. He recently bought shares in the UBS and Credit Suisse banks and Wintertour Zurich. He is also making longer-term investments in goldmines in Australia and Canada.

The real bargains are in France, he says, among the many under-priced châteaux with land in the Greater Paris area and smaller properties along the northern coast near the Channel Tunnel. "They're not for me, because I don't want to tie my money up. But if I was an American, a Japanese, or a Briton, I'd snap them up. Prices could double or even triple within five years."

Diana Geddes - in Paris

THE TRADER "Most investment analysts are too late — they are constantly missing the train"

s 1989 going to be a good year for private investment? "It's always a good time to invest if you do it smartly," says Jean-Loup Sulitzer. This self-made businessman is already one of the richest men in France as well as finding the time to write best-selling 'rags-to-riches' novels. Leaning back in his Balmain pin-striped suit (Balmain reputedly pay him \$300,000 a year to wear and promote their clothes), he takes a puff on his cigar and says, "If you are smart, you can't lose."

How does one become 'smart'? Certainly not by accumulating business degrees and diplomas, if Jean-Loup Sulitzer is anything to go by. He left school at 16 with no formal qualifications.

Since starting his own import company, virtually everything Sulitzer touches seems to turn to gold. Having started with nothing, he now modestly estimates his personal fortune at between \$14 million and \$30 million. Others say he is worth nearer \$100 million. "My dictum is simple," he says. "I buy when everyone else is depressed and gloomy, and then I sell when the market is up. Any fool could have done what I have done."

In September 1987, just before the world stock market crash, Sulitzer began to feel uneasy about the dollar and sold about one million dollars worth of shares. When the crash came, he began calmly buying up selected shares and has nearly doubled his money already.



• JOHN TUNSTILL on the terrace of the Palace of San Savino, Cita di Castello, one of 30 resaleable classic ruins won by an army of toy soldiers. "I can honestly say I do it for the love of it. I'm not really interested in the money".

THE COLLECTOR "Money for its own sake is such a boring thing"

John Tunstill, 49, is a successful investor without a single share or bond. Instead, he rescues abandoned dwellings from the wooded hills of Umbria in central Italy. Indeed, he collects, restores and resells them, continuing a collecting habit that he traces back to the age of three, when he started playing with toy soldiers. That interest lasted into adulthood, and in 1969 he turned it into a business by opening Soldiers, a specialist militaria shop around the corner from the Imperial War Museum in Lambeth, South London. In 1979, he started making his own scale model soldiers that became collectors' items in their own right, sought worldwide at

\$10 a time by a narrow, but intensely enthusiastic market of collectors. He made enough by the age of 45 to retire to Italy.

Retirement led to another company, Italian Properties, based in Cita di Castello, which buys and renovates anything from old houses to palaces and castles and sells them to British, Romans, Milanese and, increasingly, European expatriates returning from Hong Kong.

"The only rule is that if you are going to commit yourself financially, then common sense says that you have to know the market. I knew tin soldiers from childhood. After two years out here negotiating for others, I know about Italian properties too. Now I live in a lovely part of the world, recycling my cash and once again dealing in things of real beauty. I have property, assets at close to a million pounds sterling, and collectables back in the UK worth, perhaps, a quarter of a million and rising. You tell me how financial experts and the uncertainties of stock markets would make my life any better."

John Worrall - in Umbria, Northern Italy

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You may have heard about the excellent returns offered by offshore companies, yet been put off by either the lack of recognisable company names or by confusion over what they actually do.

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As an overseas resident there are definite advantages in investing offshore, but to quote the Observer newspaper of 19th June 1988, "if one is going to place money overseas the safest rule is to stick to the funds run by the offshore arms of UK financial institutions whose reputation and standing are beyond dispute."

Obviously, Barclays Bank and Barclays International Funds are such institutions.

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Soon you'll be able to bank anywhere in Europe — if you can afford the rates.

urope's cheapest credit cards are in → Portugal. But until the European Community clears the financial barriers towards the target of a single market by 1992, you'll have to wait before you can search the continent for the least expensive credit card.

When the European Commission started looking at the effects of an end to trade barriers on retail banking, it decided to concentrate on plastic money, taking the view that paper transactions would soon be a thing of the past.

In fact, check and cash transactions stubbornly refuse to be overtaken by card transactions. Leaving aside the American Express and Diners Club travel and entertainment charge cards, which, as they are repayable each month, are not true credit cards, there are only some 55 million credit cards in issue in the 330 million-strong EEC market, and the distribution of cards is extremely uneven.

Of the 20 million in the Eurocard Mastercard network and 35 million issued by Visa, nearly half are in the UK. In spite of some of the highest European interest rates, the UK has taken the credit card to heart, with 12.5 million Mastercards, mainly through Access, and 16 million Visa cards.

The main Visa card issuer in the UK, Barclays Bank, say around half their card holders clear their account at the end of the month and pay no interest. They give this as the reason why UK consumers appear oblivious to the notoriously wide gap between UK base rate and credit card interest rates. Most UK consumers, on the other hand, would blame lack of competition.

n France it's different. Credit cards have been available only since 1987 when bank-Ling law was liberalized. Before then it was difficult even to get an overdraft. Now competition for a share of this fast-growing market has driven down rates to some of the lowest in

Charges on French-issued cards are stepped, the more you borrow, the cheaper it is. The true rate of interest on Société Générale's 'Pluviel' credit card, for instance, ranges from nearly 18% to under 14%, depending on the loan.

Even French store cards offer competitively cheap rates. In the UK, store card interest rates commonly reach 35% on an annualized basis.

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diross

Across the Channel you can shop at Galeries Lafayette, charge your store card and expect to pay just over 18%. The rival Printemps store card is half a point cheaper.

West German retail banks have been slow to take to new banking technology. Credit cards are rare, although American Express and Diners Club charge cards are widely used and, unusually, in Germany they offer an overdraft facility at an annual rate of just under 19%.

Tow Germany is poised to enter the era of plastic money. As bank credit cards will be available for the first time, both Visa and Mastercard see this as their major growth market in 1989.

Shopping across frontiers for the best credit card deal will become more realistic as the European Commission gets nearer to making sure that all the cards are 'interoperable'. That means making it possible for a Dutchman to use his credit or bank cash card in a cash dispenser in Spain just as easily as a Spaniard might, and vice versa. The Commission considers this interbank cooperation as the best way of meeting the challenge from the American and Japanese banks as they

begin to compete for retail business across a Europe without frontiers in the 1990s. In practice, cooperation has a long way to go

because European banking customs vary so widely. As anyone who uses a cash dispenser card in Europe knows, the British, the French and the Spanish are keen to let you get money out of the wall, and many cards are now working across frontiers, whereas in Germany, cash dispensers, like credit cards, are still rare.



Depending on size of loan, larger loans are cheaper.

** Credit cards are rare, rate for American Express Card personal credit.

"" Includes tax.

BEST CREDIT BUYS

- Bank cards issued in Holland
- French store cards Settle up fast in the UK



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It tempers enterprise with caution, and quite clearly, it works. In half a century, we've grown from being a small Rotterdam investment club to the largest independent investment house outside the USA, with funds under management of over \$20bn.

We've achieved this by looking for sound, established investments which give long-term, low-risk opportunities for growth in every sector in which we operate.

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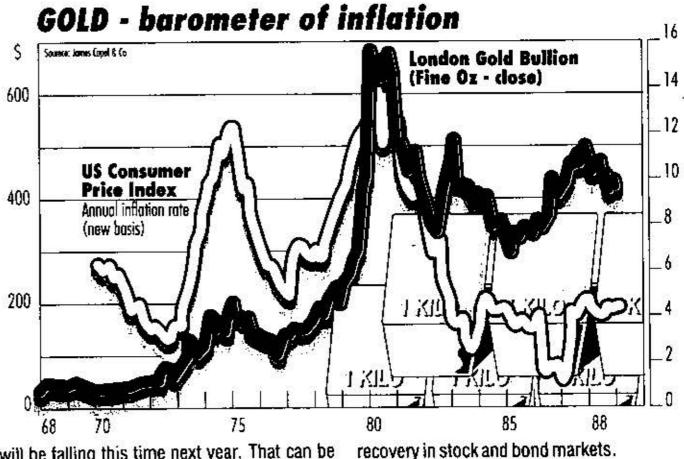
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TRENDS

Gold has a remarkable capacity to forecast inflationary trends, doubling in price with surging consumer prices in the early seventies, halving as inflation sagged in the next few years and then surging in tandem with general prices to a peak of \$850 an ounce in 1980.

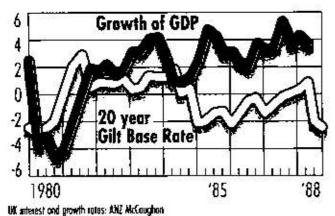
After disinflation knocked gold to a low of \$281 in the first half of the decade, the price recovered to \$500 at the end of 1987. That move implied higher inflation this year. Since then gold has slipped to around \$400. So what does this trend suggest? As central banks raise interest rates to curb inflation — gold, an ancient indicator, says that they will succeed. If the depressed bullion price is correct, inflation in major industrial nations



will be falling this time next year. That can be translated into lower interest rates and a

Neil Behrmann – in London

Yield Trends Say 'Buy UK'



Ignore the yield gap - watch the growth.

1988 was a puzzling year for investors in UK equities; the fundamentals in the economy were ignored, fear and caution took over. In 1989 the absence of recession should help to reassert an historic trend in yield relatives.

The UK economy in 1988 pointed to a boom in equities; profits of non-oil companies are likely to have increased by 20%, dividends by 30%. However, the dollar value of the market index increased by only 5%, while the rest of the world increased by over 20%. Although a dollar invested in the UK market at the beginning of 1987 would still have yielded a higher return than in any major equity market but Japan!

One reason for the poor performance was that the UK was ahead of the rest of the world in the business cycle. Strong demand growth and tight labor markets led to rising interest rates and inflation which discouraged interest in equities. Investors are only now recognizing that the unexpected growth in other economies which led to the strength of other bourses is part of a similar world business cycle, with similar consequences.

One indicator of the similar trends is the yield curve. In the UK this became inverted in the

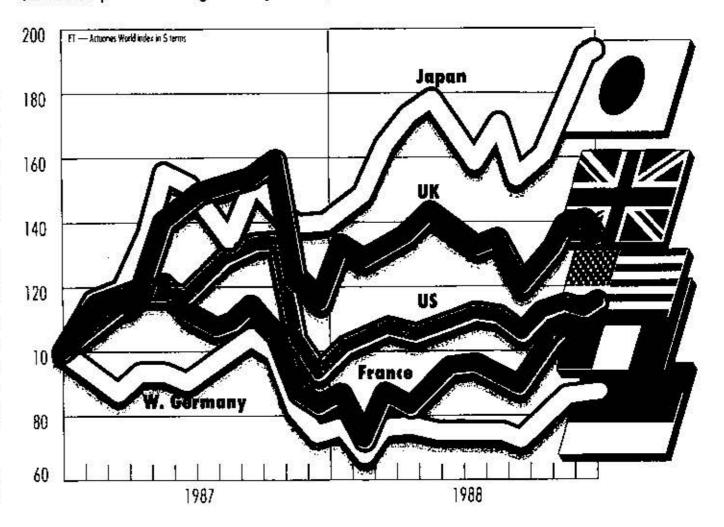
second half of 1988, while in the US it is only now happening. Generally, an inverted yield curve in the US has been followed by recession, and is therefore taken as a leading indicator for weakness of equities. In the UK, however, it is only in the nervous post-Autumn 1987 crash environment that the inverted yield curve encouraged investors to switch equities for cash. The yield curve has been "perverse" in the UK for most of the 1980s yet, apart from 1981-1982, output growth was buoyant and the equity market saw sustained rises. With worries about the sensitivity of the US to high interest rates such a trend in both UK and US yield curves should favor UK equities.

Although the UK economy will enter the slowdown phase of the growth cycle early in

1989, there will not be a recession. Lower short term interest rates, profits growth of about 8% and dividend growth of 15% should all support equities. The exchange rate risk that discouraged investors in 1988 should ease as the current account deficit stabilizes. Because of weak equity prices and low yields are long detail bonds the yield ratio has fallen.

on long dated bonds the yield ratio has fallen significantly below its average of the past ten years. We expect economic fundamentals to reassert themselves and correct the divergence from trend within the year. Such a correction would imply a 10% to 15% increase in the UK market over the coming year.

Ian R. Harnett - Senior UK Economist, ANZ McCaughan





Founder Henry Luce

This space normally belongs to the editor and publisher of the magazine you hold in your hands, used by them to point with pride to particular stories and introduce you to the people who created them. Almost never is there any need to talk about the extended family of other magazines and the book, video and cable enterprises that make up the whole of the parent Time Inc. corporation.

Indeed, we resist the occasional temptation to report to you about our more general activities in part to ensure there can be no confusion anywhere about the independence of each of our magazines and, for that matter, of all our entities in print and video.

I am here breaking that rule to reinforce the point, because on March 4, 1989, Time Inc. and Warner Communications Inc. announced they would join to create a new company, Time Warner Inc., which would be the leading information and entertainment company in the world, with revenues of more than \$10 billion.

This new company is, by any measure, very big news. If the shareholders of the two combining companies and the appropriate regulatory agencies approve, Time Warner Inc. will consist of an extraordinary range of enterprises—moviemaking, records, hardcover and paperback books, television and cable programming, cable systems and of course magazine publishing. You are undoubtedly already familiar with many of these businesses and their products.

The proposed melding of Time Inc. and Warner Communications has been reported all over the world, as you no doubt know. We thought it fairer at the outset to let others take the lead analyzing in depth its ramifications and significance. But there are some important things that can be said only by us, to you.

Let's start in 1922. That year, in a small office on 17th Street in Manhattan, two young men, Briton Hadden and Henry Luce, wrote a prospectus for a radically new magazine that became TIME. Hadden lived only long enough to see TIME become a success; under Luce, Time Inc. grew into the largest magazine publisher in the U.S. When Luce died in 1967, Time Inc. had four magazines. Today it publishes 13 and is part owner of another eleven. Along the way it also became one of America's most significant book, video and cable-TV companies.

Among other virtues, Luce believed, true to his Presbyterian origins, that Time Inc. must always be in business not only to make money but also to make a difference in society, in domestic and world affairs and in people's lives.

Luce's commitment to public service as well as to profit has been shared by all of his successors. The proposed new company, Time Warner Inc., has explicitly reaffirmed those values. The traditional integrity and independence of Time Inc. journalism, in this magazine and all our magazines, will be a cornerstone of this new company.

Time Warner Inc. will be one of the major forces in news, information and entertainment in the 21st century, ensuring an American presence in a competition that lately has been dominated by foreign enterprises. In 1941 Luce declared the 20th century to be the American century. We believe he would have recognized that the 21st century will be a global century and would heartily approve this move positioning the company he started to continue to play its historic role.

At the heart of this enterprise will be the same spirit that infused those two creative dreamers on 17th Street. Our dedication to and respect for you the reader are as strong as ever.

Jason Wi Manue

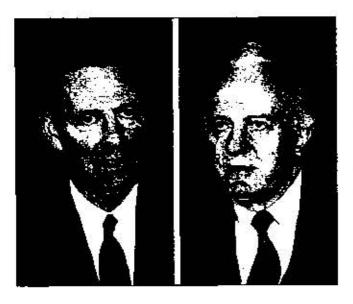
TIME

THE WEEKLY NEWSMAGAZINE

COVER: Scientists have 58 embarked on a bold \$3 billion program to map genes and solve the mysteries of heredity

Headed by Nobel laureate James Watson, the project is ushering in a new era in medicine. Doctors may eventually be able to predict, cure and even prevent deadly genetic disorders as well as heart disease and cancer. ▶ The quest is already raising a host of thorny legal, ethical and philosophical issues, from discrimination to invasion of privacy. See SCIENCE.





EUROPE: The superpowers agree to 20 shrink conventional arsenals in Europe, but conflicts loom over the details

The 23-nation Negotiations on Conventional Armed Forces in Europe, which got under way in Vienna last week, are destined to become the arms-control battlefield of the 1990s.

▶ The opposition in Poland wins a reorganization of the political system, including creation of an elected senate and a powerful presidency. ▶ West Berlin cracks down on vendors from Poland.



INTERVIEW: Popular, irreverent and 34 eager to get even, former Politburo member Boris Yeltsin plots his comeback

There have never been any second acts for Soviet politicians. But Yeltsin, whose reformist zeal and public criticism of corruption and inefficiency led to his fall from power in 1987, aims to change that. Now a candidate for the new Congress of People's Deputies, he sizes up the political life in his country, the road forward for *perestroika*, and his personal opponent, Yegor Ligachev.

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WORLD: In Tibet, a proindependence demonstration prompts a Chinese crackdown

When a small group of Buddhist monks and nuns march peacefully in Lhasa, the police open fire. In the riots that follow, at least 16 die. To tourists being hurried out of the city, the Tibetans plead, "Tell the world to help."

▶ The Dalai Lama is worried that his country may become a "slaughterhouse."

26



UNITED STATES: Bush tries to run the show by himself

The President relies on energy and his own intelligence work, but so far, his priorities are a muddle.

► Early applause greets a new Pentagon nominee.

38



BUSINESS: A bitter strike brings down Eastern Air Lines

Six days into a machinists' strike, the carrier enters bankruptcy. Time Inc. and Warner merge, forming the world's largest communications company.

46



LIVING: Hey, you guys, where are you taking those duds?

Valentino and Romeo Gigli, two of Italy's most visible designers, have outraged the motherland by announcing they will show their clothes in Paris. Some call it treason.

56



MEDICINE: A heart treatment's value is questioned

A study finds that arteryinflating balloon angioplasty is unnecessary if a heartattack patient is given a clotdissolving drug. > Snuffing the common cold?

57



THEATER: London basks in an unusually rich season

A lavish new musical based on Fritz Lang's 1927 film Metropolis is a rousing, even spellbinding addition to the West End's current offerings.

71



SCENE: The personal museum of a grand collector

His bed dates from the Qing dynasty, and his armchair is even older. For Beijing's Wang Shixiang, preserving antiques during a tumultuous era has been his greatest feat.

80

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76 Books

Because of a printers' strike in the Netherlands, there have been delays on deliveries of this week's and last week's issues of TIME. We regret the inconvenience. Cover:

Photograph by Dennis Chalkin



NOW DISTANCE IS NO LONGER A BARRIER.



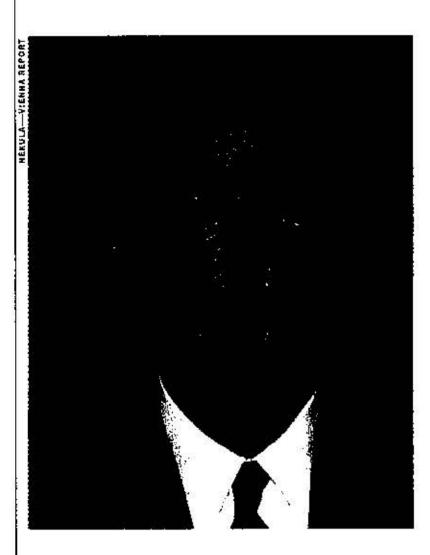
Most long-haul flights used to be exactly that. A long haul, with the inevitable refuelling stop en route. The barriers of distance stood in our way.



But now those barriers have been broken, by the largest, fastest long-haul aircraft in the world. SIA's MEGATOP 747. It will be the first passenger aircraft ever to fly nonstop between Singapore and London . . . cutting hours off normal travel times; the first stretched upper deck 747 capable of flying San Francisco to Hong Kong nonstop, or Honolulu to Singapore nonstop; and the first of its type to serve Europe, Australia and Asia. Yet no matter how many hours our MEGATOP may save you, you will still have ample time to enjoy a standard of inflight service even other airlines talk about. The MEGATOP 747 takes you further, faster, in greater comfort and luxury, than you ever imagined. Experience it from 9 April 1989.



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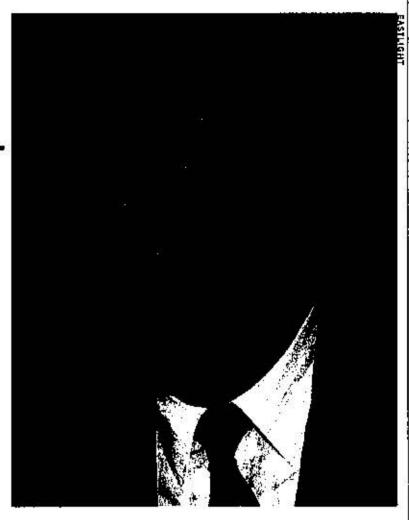


"The proposal [the Soviets] advanced was really remarkably close to the NATO proposal . . . [We're] off to a pretty good start."

-JAMES BAKER

"We would like to hope that our way of thinking and acting is no longer identified in the West with ill will or evil intentions."

-EDUARD SHEVARDNADZE



EAST-WEST

Let's Count Down

The superpowers want to shrink conventional arms, but don't agree how

BY JILL SMOLOWE

or omen seekers, the outward signs were propitious. Secretary of State James Baker bounded down the stairs, hurried to Soviet Foreign Minister Eduard Shevardnadze's side and offered a hearty handshake. Smiling and pumping arms, they then began their maiden meeting in the glittering, baroque Festsaal in the sprawling Hofburg, that imperial crescent of stone buildings in the heart of Vienna. The locale was rich with inspiration: in 1815 the Congress of Vienna convened at the nearby chancellery to redraw the political face of Europe. Last week's gathering of 35 foreign ministers ushered in a modernday reprise to redraft the Continent's military map. The talks, called CFE-Negotiations on Conventional Armed Forces in Europe—are destined to be the arms-control battlefield of the 1990s.

At issue are not only the more than 5 million armed troops deployed throughout the Continent but also, by NATO's count, some 70,000 tanks, 140,000 armored troop carriers, 68,000 artillery pieces and 12,000 combat aircraft. The

overriding goals of the talks will be to reduce the possibility of surprise attacks and large-scale offensive operations and to diminish the oppressive levels of firepower and military manpower. Optimally, both NATO and the Warsaw Pact will be restructured along defensive lines, with no country or alliance having the power to attack others. Acknowledges a Soviet expert on conventional arms: "This is the most complicated diplomatic task since the end of World War II."

While the opening atmospherics were promising, the devil, as arms controllers say, is in the details. The Soviets scored early with ambitious unilateral initiatives that went a long way toward meeting the basic Western criterion of trimming the Warsaw Pact's alarming and unmatched capacity to overrun Europe. Beyond that, the East bloc is prepared for a fundamental restructuring of the Continent's military balance that could sharply diminish the dangerous confrontation across Europe's political fault line.

By way of response, the U.S.-led NATO proposal sounded modest and a bit miseriy. British Foreign Secretary Sir Geoffrey Howe spelled out the West's starting position, warning that NATO was not interested in a "competitive striptease." The plan, which he said went "far beyond bean counting," in essence called for deep cuts in the Eastern forces, with only minor reductions of up to 10% in NATO dispositions. Baker gave a more philosophical speech, but it was thin on specifics and failed to counter Shevardnadze's longerrange proposals.

Despite the daunting negotiations ahead, which optimists say will last at least two years, both sides showed a rare eagerness to make these talks succeed. If a pragmatic tone distinguished their formal speeches, a private meeting between Baker and Shevardnadze at the official residence of U.S. Ambassador Henry Grunwald plainly left the two statesmen in high spirits. "My impression is that both sides are willing to cooperate," Shevardnadze said enthusiastically. A relieved Baker said, "The proposal [the Soviets] advanced was really remarkably close to the NATO proposal... [we're] off to a pretty good start."

The atmosphere of promise contrasts sharply with the record of CFE's moribund predecessor, the Mutual and Balanced Force Reductions negotiations, known inelegantly as MBFR. For 15 years, NATO and Warsaw Pact negotiators never moved beyond a stalemate over head counts, with both sides arguing fruitlessly about how many troops and weapons the other had deployed. Soviet leader Mikhail Gorbachev broke that logjam in April 1987 by admitting that the East bloc has a clear edge in conventional forces, then accepting the logic that the Warsaw Pact will have to absorb deeper cuts. Says Stephen Ledogar, head of the U.S. delegation to the CFE talks: "We're not hearing the old thinking, 'What's mine is mine, and what's yours is negotiable.'"

As Shevardnadze detailed Moscow's opening position last week, several encouraging points of convergence emerged. By calling for weapons reductions to 10% to 15% below present NATO levels, he signaled Moscow's willingness to make asymmetrical cuts. His proposal for an eventual conversion of remaining forces to a "strictly defensive character" echoed NATO's call for "the restructuring of armed forces to enhance defensive capabilities." Perhaps most important, the two sides agreed that verification of any conventional-arms pact must be rigorous. Shevardnadze gave the nod to on-site inspections "without right of refusal," adding that all verification measures would be accepted, provided there is reciprocity. "We would like to hope," he said, "that our way of thinking and acting is no longer identified in the West with ill will or evil intentions."

Still, the potential for irreconcilable differences looms. In putting forward his proposal, Shevardnadze pushed beyond the talks' mandate on several key points.

Concerned about NATO's superior air power, Moscow listed tactical aircraft and combat helicopters among the "most destabilizing categories of armaments" that need to be cut back. The West has consistently maintained that aircraft should not be included in the negotiations, as they cannot seize and hold territory. Similarly, Shevardnadze indicated that while naval forces are not officially part of the talks, they must eventually be considered. Washington currently considers the matter non-negotiable.

hen there was Shevardnadze's vague mention of "zones" or "strips" in which little or no military activity would be allowed. Playing directly to West Germany, which shares the longest frontier with the East, Shevardnadze suggested a rollback of short-range nuclear forces and a lower conventional presence in the zone bordering both Germanys. The idea has appeal in Bonn, where some officials have been pressing for a two-track approach in which reductions of short-range nuclear forces would parallel those achieved in the CFE talks. They suggest that if the Warsaw Pact agrees to eliminate its conventional superiority, the West might agree to eliminate some or even all battlefield nuclear weapons. NATO is divided, however, over just how tightly the two weapons categories should be knit.

The alliance is also deeply rent over the question of modernizing its shortrange nuclear forces. Debate rages within NATO over the replacement of 88 aging Lance missile launchers. West Germany

argues that any decision should be postponed until after 1990, thus wielding the threat of modernization as a means to increase pressure on the Soviets to make concessions on conventional arms. The U.S., Britain and France counter that the modernization should go forward, to position NATO better now to negotiate reductions with the Soviets later. Determined to keep West Germany firmly in the NATO camp, Baker reached out to Bonn last week with an unexpected gesture. He suggested that the Bush Administration might speed up the withdrawal of chemical weapons from West Germany, currently targeted for 1992.

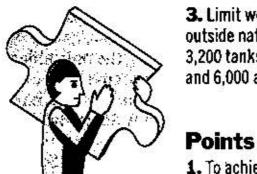
But disagreements over issues like modernization handicapped NATO as the CFE negotiations got under way. The equivocations of West Germany's Ostpolitik troubled the U.S. and Britain, and recent conflicts between Greece and Turkey nearly scuttled the talks altogether. Negotiators are also wary about the participation of the French, whose Gaullist aloofness toward NATO led them to snub the MBFR talks; so far, the French have shown a prickly independence in preparatory discussions for CFE. France does not want to appear to be reintegrating its forces into the NATO structure, so each of the 16 NATO and seven Warsaw Pact countries theoretically stands independently in the CFE talks, worrying the American delegation, which prefers to control the course of negotiations.

Western diplomats also anticipate difficulties within NATO on the pace of the talks. Some, seeing in Gorbachev an eager partner, will seek to speed up the bargaining. Others will try to slow the process of

BRIDGING THE GAP

NATO Proposal

- 1. Reduce the number of weapons on each side to 20,000 battle tanks, 16,500 artillery pieces and 28,000 armored troop carriers.
- 2. Prohibit any one country from deploying more than 30% of its side's overall forces.



3. Limit weapons stationed outside national boundaries to 3,200 tanks, 1,700 artillery pieces and 6,000 armored troop carriers.

Warsaw Pact Proposal

- 1. Reduce arms by 10% to 15% below present NATO levels, which would leave approximately 14,000 battle tanks, 12,300 artillery pieces, and 3,600 armored infantry fighting vehicles (but exclude all other armored personnel carriers); create a nuclear-free buffer zone along the NATO Warsaw Pact divide.
- 2. After that reduction, cut forces another 25%.
- 3. Convert remaining forces to a "strictly defensive character."

Points of Convergence

- 1. To achieve equal limits will require much deeper cuts by the East bloc.
- 2. Reduction of forces will fall somewhere between 5% and 15%.
- 3. Intensive verification procedures must be put in place.



Points of Contention

- 1. Moscow wants to negotiate withdrawal of tactical aircraft; Washington does not.
- 2. The Soviets are pressing for parallel negotiations on the withdrawal of short-range nuclear weapons; the West is resisting.
- 3. Both sides agree that haval forces are excluded under CFF, but the Soviets insist they must be considered at some point.

disarmament for fear of bringing about a greater erosion of NATO's will to defend itself or a complete withdrawal of the American troops stationed on European soil. Warns Martin McCusker, director of the military committee of the North Atlantic Assembly, NATO's parliamentary wing: "The talks are bound to bring out many of the intra-alliance tensions we've tried to keep buried and which Soviet obstinacy has helped stifle."

The Soviets have looked decidedly less threatening since Gorbachev indicated that he would consider asymmetrical cuts in Europe's defenses. He went a wellreceived step further in his address before the U.N. General Assembly last December by announcing the unilateral withdrawal of 500,000 Soviet troops and 10,000 tanks, to be made over the next two years. In recent months the Soviets have further swayed public opinion in Western Europe by adopting a 10% cut in defense spending and publishing detailed figures of troop and arms levels. Moscow has also acceded to Western demands that the talks cover all of Europe—not just Central Europe, as in the MBFR negotiations—thus taking into account some Soviet troops stationed on home soil. Gorbachev expansively describes the new zone as running "from the Atlantic to the Urals."

found flexibility is Gorbachev's need to transfer scarce resources from the military to the civilian economy if he is to improve living conditions at home. By paring the military, Gorbachev aims to free not only investment resources but human resources as well. With public pressure building to reduce or even abandon the Soviet Union's unpopular conscription. Gorbachev said last October that the length of military service may be shortened. Presumably, for each good soldier lost, Moscow hopes to gain a good worker.

As the two sides go through a diplomatic grope in search of common ground, neither expects the CFE talks to be a kaffeeklatsch. (The talks were originally given the acronym CAFE, but that was discarded as too frivolous.) It is a promising sign that negotiators chose last week to accentuate the positive. "They called for several things which sound pretty reasonable," said Ledogar of his East bloc counterparts. Concurred Oleg Grinievsky, chief of the Soviet delegation: "The very first hours witnessed an exchange of positions, rather than recriminations." Baker and Shevardnadze boosted optimism by setting a May date in Moscow to discuss resumption of Strategic Arms Reduction Talks and explore the timing of a superpower summit. But, cautions Baker, "we've got some hard bargaining ahead of - Reported by James O. Jackson and Christopher Ogden/Vienna

America Abroad

Strobe Talbott

Real Weapons, High Hopes

The Vienna talkathon on conventional forces in Europe (CFE) may turn out to be something new in the history of arms control: a negotiation that could tangibly improve the daily lives of ordinary citizens, particularly in Eastern Europe.

In that respect, CFE is different from its variously initialed cousins SALT, START and INF, which dealt with the arsenals of Armageddon: missiles and bombs that are too unconventional to use. The control of nuclear arms is part of the larger, thoroughly laudable, but often abstract exercise of fine-tuning the balance of terror so as to make it a bit more balanced and a bit less terrible. CFE, by contrast, deals with real weapons, things that actually hurt people: a tank that can crush bodies on a town square; high explosives not measured in kilotons but

still able to destroy a building and everyone in it; and that most essential fighting machine, a young man in uniform afraid of dying and therefore ready to kill.

NATO's objective has long been to reduce the number of tanks, guns and soldiers in the Warsaw Pact and thus diminish the threat of a Soviet-led armored blitzkrieg. Mikhail Gorbachev has rendered that nightmare less plausible with the stunning cutbacks and withdrawals that he announced at the United Nations last Dec. 7.

Western defense experts have been busy plugging the numbers in Gorbachev's various initiatives into their computerized war games, along with plenty of worst-case assumptions about the readiness of NATO. As a result, the bottom line of many such calculations has changed: the most often cited "sneak-attack scenario," which might before have yielded a Soviet victory, now leads to stalemate or even defeat.



The Soviets roll into Prague in 1968

Building on Gorbachev's unilateral cuts, the CFE talks could further lessen the likelihood that the Kremlin's hordes will ever invade Western Europe. With that reassurance, American and allied statesmen can turn their attention to the much more immediate danger of political turmoil and military crisis inside Eastern Europe.

The Warsaw Pact has the bizarre distinction of being the only alliance in history that has occupied or invaded not enemy territory but that of its own member states: East Germany '53, Hungary '56, Czechoslovakia '68. The imposition of martial law in Poland in 1981 was nothing less than a Soviet-backed military coup d'état within the Communist Party.

The Warsaw Pact is both the symbol and the instrument of Soviet domination over what used to be called the captive nations. Even if the forces of the pact were cut to one-third their current size, they could still "protect the gains of socialism" by "extending fraternal assistance" to a regime facing revolt or collapse.

But just as the specter of an East-West conflict has receded, East-East police actions may also grow harder to justify, and someday perhaps harder to execute. Hungary, Poland, East Germany, Czechoslovakia and Bulgaria have all followed Gorbachev's lead by announcing large cuts in defense spending. The gradual demilitarization of those societies could fuel economic reform by freeing resources for civilian industry.

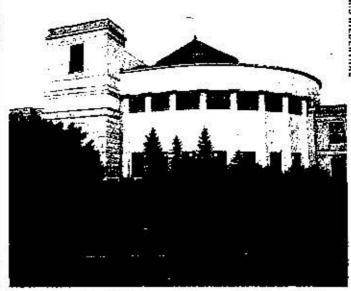
But most important, a decrease in the Soviet military presence—whether in garrisons on the outskirts of East bloc capitals or over the horizon in the U.S.S.R. itself—may induce those regimes to rely less on the threat of force and more on a genuine social compact between a government and its citizens.

Stepping Out of The Desert

Agreement to reform the state

hen so-called round-table talks between the Polish regime and the Solidarity-led opposition began last month, few observers expected a breakthrough, let alone a quick one. The stakes were high: at issue was the political price the government would pay to win support for economic austerity measures. Last week, to just about everyone's surprise, the negotiators disclosed that they had agreed on a thorough reorganization of the political system. Reform would include the creation of a senate to complement the existing lower house, or Sejm, with members chosen in free elections, as well as the institution of a powerful presidency, with the officeholder selected by parliament. Said Jacek Kuron, a leader of the banned Solidarity trade union: "This is a step toward democracy the like of which has never been taken before under this system."

If the accord is carried out, it will mark the first time a Communist government has voluntarily ceded a major share of power to the opposition. Not only would Solidarity and other opposition groups be free to compete for seats in the 98-member senate but there would also be liberalized elections to the Seim. in which non-Communists could win up to 35%, or 161, of the 460 seats. (Currently, the Communist party controls 404 seats.) Members of the two-chamber leg-





Parliament building and demonstrators in Warsaw: a new senate and presidency

islature would then elect the President.

Details of the pact will not be revealed until April 3, when the round-table talks are to close. But government and opposition leaders said last week they had already agreed to parliamentary elections in June. Opposition sources added that the two sides have come to full or partial agreement on such other issues as restoration of legal status to Solidarity, which was banned in 1982, opposition access to the mass media, greater democracy in local government and the establishment of an independent judiciary. Just two weeks ago, negotiators were deadlocked on all of those points.

Even under a reformed government, however, the Communists are not about to yield their pre-eminent place. "Nowhere do elections challenge the political system," said government negotiator Janusz Reykowski in a televised interview. "That would threaten the stability of the state." The most likely candidate for the post of President is General Wojciech Jaruzelski, who currently runs Poland as First Secretary of the Communist party and President of the Council of State. Said Bronislaw Geremek, who represents Solidarity in the political segment of the round-table talks: "A process has begun under which democracy is to be rebuilt in an evolutionary manner, without upsetting the political balance or stability."

Despite overall agreement on political changes, the two sides remain at loggerheads on the crucial question of economic reform. Solidarity is demanding that wages be indexed to the inflation rate, currently 70%, and that price increases for food and other necessities be introduced gradually; the government would like to see prices rise sharply, and would limit indexing to avoid further fueling inflation. As demonstrators rallied, opposition leaders could hardly contain their excitement last week at what had been accomplished. Said Geremek: "After 45 years in a political desert we suddenly find ourselves in a completely new -By Michael S. Serrili. situation."

Reported by Angela Leuker/Vienna

Verdict on Katyn

or nearly half a century most Poles have suspected that Soviet forces were responsible for executing more than 4,000 Polish officers during World War II in the forest of Katyn, near the Soviet city of Smolensk. Amid the millions of victims of World War II, the massacred military menamong 14,500 officers captured in Poland who disappeared

symbol, for Poles and others, of Stalinist brutality. After the German army revealed the existence of the mass graves at Katyn in 1943, Moscow, echoed by successive Communist governments in Warsaw, blamed the Nazi invaders for the butchery. The conflict over so vital an aspect of World War II history poisoned Poles' attitudes toward the Soviet Union and their own rulers.

Last week General Wojciech Jaruzelski's government admitted officially

for the first time what Poles have been thinking all along. Said spokesman Jerzy Urban: "We believe that everything indicates the crime was committed by the Stalinist NKVD," the Soviet secret police of that period. Last month the Warsaw weekly Odrodzenie published a 1943 Polish Red Cross report that dated the Katyn killings between March and May 1940, before Nazi forces arrived in the area. The report had been found in a London public-records office two years ago and was subsequently passed on to Moscow by Polish from Soviet prisoner-of-war camps—became a powerful historians who are members of a joint Polish-Soviet commis-

sion appointed to fill in "blank spots" in the two countries' history. Formed two years ago in response to increasing public pressure on the Polish government, the panel so far has failed to come up with concrete conclusions. Even in the era of glasnost, which has countenanced Soviet recognition of some of Stalin's crimes, Moscow's only concession regarding Katyn has been an announcement that a monument to the dead officers will be built at the site by the Soviet government.



The murdered officers in their mass grave



The good old days: Polish vendors throng the Krempelmarkt before the crackdown

WEST GERMANY

Thanks, But You're Not Welcome

West Berlin declares itself off limits to Polish entrepreneurs

he rush began in January after Poland lifted restrictions on obtaining tourist visas to West Germany. On Saturdays, first dozens, then hundreds, then thousands of Poles poured into West Berlin, a two-hour drive from the border—not to sight-see but to engage in commerce. On a muddy patch of land near the Berlin Wall known as the Krempelmarkt (flea market), they began selling everything from baby clothes to tool kits—porcelain, unpolished amber jewelry, even slabs of meat. Scenting bargains, thrifty Berliners, especially the less well off, flocked in to buy. Saturday evenings the "tourists" headed home, their pockets filled with deutsche marks, which are worth a fortune on the black market in Poland. "What I earn in a month at home I can earn here in a day," explained one entrepreneur as he hawked a pile of gaily colored sportswear.

It was too good to last. Responding to complaints from local merchants, West German police and customs agents began cracking down on the migrant merchants. At the Dreilinden and Heiligensee entry points to West Berlin, customs officers seized hundreds of sacks of smuggled food from Poles and turned back more than 200 cars and buses, declaring them unsafe to travel on city streets. The Krempelmarkt was sealed off with a 10-ft. metal fence, and police were ordered to disperse Polish peddlers and confiscate their goods if necessary. Some 300 Poles were summarily rejected from West Berlin and barred from future entry.

"We like Polish people to come here," insisted Elmar Pieroth, West Berlin's senator for economics and labor, "but when they come as tourists, they cannot engage in illicit trading." Not only were the Polish vendors unfair competition for local merchants, officials said, but they were

clogging the streets around the Krempelmarkt and leaving behind tons of garbage.

Some Poles still sell their goods clandestinely in West Berlin out of suitcases and the trunks of cars, all the while complaining about the crackdown. "I don't think you people in the West have any idea just how bad the situation is in Poland," said a middle-aged Warsaw resident. "Surely more indulgence can be shown." West Berlin critics, including the local Chamber of Commerce and Industry, argued that the city fathers were unnecessarily harsh. Said the chamber in a statement: "Berlin, with its own desperate postwar experience, is especially called upon to exercise tolerance."

The street vendors got little sympathy from the press at home. The English-language daily Warsaw Voice accused them of seeking "big and easy money," while the youth newspaper Sztandar Mlodych expressed concern that the flea-marketeering visitors to Berlin were "damaging the country's image abroad." —By Michael S. Serrill. Reported by Clive Freeman/Berlin



Everything from porcelain to slabs of meat

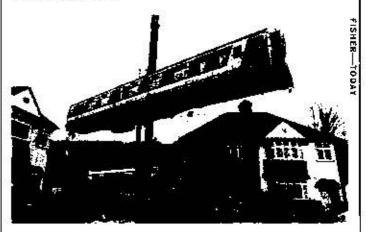
BRITAIN

Crashing and Clashing

More rail wrecks raise hackles

grandmother of modern transport, losing its safety edge? That was the question being asked last week as authorities launched investigations into the two latest fatal train accidents. All told, 42 people have died in rail collisions since Dec. 12, when three morning-rush-hour trains smashed into each other at Clapham Junction near London, killing 35 passengers.

The more serious of the two mishaps took place at Purley in South London, when a train bound for Victoria Station struck another northbound train from behind. Six of the second train's eight coaches careened down a 60-ft. embankment, killing five people and injuring 94. Three days later, two trains collided head on in Glasgow; two people perished, and 52 were injured.



Cleaning up after the accident in Purley

British Rail attributed the most recent accidents to human error: red signals appear to have been ignored. The parliamentary opposition went several steps further, blaming government policies for the mishaps. John Prescott, the Labor Party's transport spokesman, pressed for an inquiry to "ensure that standards were not being compromised to meet financial targets that were too demanding." British Rail has been squeezed by the government's insistence that it pay more of its own costs. Public subsidies for the 23,000mile network have declined from \$1.6 billion in 1983 to \$1.4 billion this year, and are to take a sharp drop in the next fiscal year to \$1 billion. The cutbacks have slowed the pace of modernization.

On another front, British Rail last week unveiled a revised plan for the high-speed rail link from the Channel tunnel to London, which is due to be completed around 2000. Responding to environmental protests in South London and Kent, British Rail said that the 68-mile route would be partly or completely underground—a proposal that would add about \$900 million to the cost of the project.

GREECE

"No Mud Touches Me"

After allegations he took payoffs, Papandreou fights back

he corruption charges that have been scorching Greek politics engulfed Prime Minister Andreas Papandreou last week in the worst crisis of his tenure. Papandreou found himself compelled to rebut allegations by the central figure in the multimillion-dollar banking scandal that the Prime Minister personally received some of those millions as secret payments for political favors. The accusations, which ran in TIME and as a cover story in several of the magazine's international editions, inspired passionate outcry in Greece and provoked opposition leaders in Parliament to demand the Prime Minister's resignation.

The charges came from George Pas Koskotas, 34, imprisoned owner of the Bank of Crete and onetime crony of the Socialist Party's (PASOK) ruling élite. Koskotas, now a fugitive from Greece, is accused of looting his bank of more than \$210 million. In jail in Massachusetts and facing extradition, Koskotas told TIME that much of the missing money was used to make regular payoffs to PASOK officials.

In Athens the Prime Minister fought back by accusing his political and "foreign" opponents of conspiring to overthrow him. Looking drawn and nervous, Papandreou defended himself in a 15-minute televised address to the nation. He dismissed Koskotas' "despicable allegations" as part of an "unprecedented political conspiracy" aimed at destroying "Papandreou, the government, democracy



Passionate outcry: press reaction; inset, the Prime Minister

and the independence of the country," in order to restore a "regime of dependence and subjugation." In fact, declared Papandreou, "not a trace of the mud flying from all sides touches me." He went on to claim that he had spared no effort in making the "truth shine." Finally, said the Prime Minister, he has authorized his lawyers to file a suit against TIME in Greece and elsewhere.

Papandreou's staunch denial of wrongdoing did not prevent rival politicians from calling for his resignation. "He is becoming a laughingstock with his repeated theories about plots," said Constantine Mitsotakis, head of the conservative New Democracy Party. But two members of the Prime Minister's own PASOK party, both former ministers, also called on Papandreou to step aside—so far the only sign of internal revolt.

Meanwhile, the spreading scandal continued to collect victims. Yannis

Mantzouranis, former secretary to the Greek Cabinet and a Koskotas confidant, was arrested on allegations that he received \$2 million from Koskotas in a Swiss bank account. According to Koskotas, the money was to be passed on to another foreign bank account controlled by Menios Koutsogiorgas, at the time a Deputy Prime Minister, supposedly as payment for winning passage of a bank-secrecy law favorable to the Bank of Crete.

Also jailed was Panayotis Vournas, general manager of the postal service. He was charged with depositing 7 billion drachmas (nearly \$50 million) in the Bank of Crete in an attempt to shore it up shortly before the scandal broke last fall. The post office is one of several state-man-

aged corporations that deposited funds in the Bank of Crete, allegedly at an interest rate some 12 percentage points below normal, allowing Koskotas to skim off the difference.

As opposition parties planned mass street rallies to force Papandreou's resignation. Parliament was debating a motion of no confidence that would bring about new elections. But most political observers predicted that Papandreou would weather the vote, set for early this week. His political fate is not likely to be settled until Greece holds scheduled elections in June, and the outlook for the beleaguered Prime Minister then is considerably more problematic.

—By William R. Doerner.

Reported by Mirka Gondicas/Athens

CHARITIES

Nosing After Funny Money

Britons go bonkers

ly when it is for a worthy cause. Millions of normally decorous Britons popped on bright red plastic noses for a day last week and occasionally acted silly, but it was all to the good. When the second annual bout of clowning-for-charity known as Red Nose Day had ended, the group that organized the event—Comic Relief, a coalition of comedians and professionals, including lawyers, advertising people and film producers—had pulled in more than \$18 million. Some of the money will be given to charities with projects abroad, including Oxfam and Save the

Children; the rest will go to groups helping the young and the elderly in Britain.

Most of the proceeds came from the sale of 7 million noses, like those worn by circus clowns, for 86¢ each; the Duchess of York pinned one to the ribbon of her ponytail. For \$1.72 each, revelers bought



Schnoz patrol: police officers clown around

1.8 million larger proboscises to fasten to the hoods of their cars. There were even noses flying on the aircraft of Virgin Atlantic Airways. Celebrities took part in a seven-hour British Broadcasting Corp. extravaganza, performing songs and skits and taking telephone pledges for donations. Ordinary folk around the country vied for the most outrageous charity stunt. In Swansea, South Wales, some pub regulars changed into formal attire and ate a three-course meal, complete with champagne, atop eight tons of cow manuregenerating \$1,200 in pledges. Others chose to soak in tubs of cooked cold rice or baked beans or porridge. A BBC electrician, naked except for some strategically placed proboscises, did a 200-yard "streak" with a chum outside Broadcasting House in London. Sir Winston Churchill (whose statue at Parliament sported a scarlet schnoz) might have called it their funniest hour.

CHINA

Protest and Repression

Out of restive Tibet comes a plaintive cry: "Tell the world to help us, please!"

BY MARGUERITE JOHNSON

t flared up as a small if defiant protest in the center of Lhasa, the capital of Tibet. Thirteen Buddhist monks and nuns began marching back and forth in front of the Jokhang Temple, the holiest sanctuary in the land. Waving a tiny homemade Tibetan flag, an act forbidden by Chinese authorities, they chanted, "Tibet is independent!" and "Long live His Holiness, the Dalai Lama!" A few displayed pictures of the Dalai Lama, the spiritual and temporal leader of Tibet, who now lives in exile in India.

Atop the police station in the center of the city, Chinese security officers were already taping the protest with video cameras. "Suddenly I heard the crash of breaking glass," recalled an American tourist who was on a nearby street. "I heard a dozen single gunshots coming from above my head." The Tibetans responded by throwing stones. As hundreds of other demonstrators joined in the fray, police armed with tear gas, automatic weapons, lead pipes and electric prods moved in, and the confrontation turned ugly.

At the root of the protest was the Tibetans' festering anger over Chinese rule of their Himalayan homeland, which was forcibly annexed by China in 1950. What began as a demonstration in favor of independence rapidly deteriorated into an ethnic rampage as protesters ransacked Chinese-owned shops, stalls and restaurants. The toll: at least 16 people killed, by the official count, though some estimates put the number dead at more than 70. Scores of others were injured.

In an unprecedented show of force, Beijing responded by imposing martial law—for the first time in the history of the People's Republic—and backed it up with 1,000 heavily armed troops to augment the paramilitary forces in the region. Foreign tourists visiting Lhasa were roused in the night by police and told they would have to leave the capital within 36 hours. Before they departed, however, they saw Tibetans being dragged from their homes and hauled away in trucks. Said a West German traveler after his arrival in the nearby Chinese city of Cheng-du: "The Tibetans were really frightened, especially because we were leaving. One Tibetan told me repeatedly, 'We are finished, we are finished.' They think there will be waves of arrests."

A similar experience was reported by an American traveler. Said she: "People begged us repeatedly over the last few days, "Tell the world to help us, please!" In a statement to the United Nations, a group of departing foreigners called on the world to "carefully and critically examine the causes of this conflict and the methods and motives of the authorities."

Li Zhaoxing, the spokesman of the Chinese Foreign Ministry, denied that the Beijing government was violating Tibetans' human rights. Said he: "Recently a handful of separatists committed acts of beating, smashing, looting and burning in a deliberate attempt to start a riot. These violent incidents, aimed at splitting the motherland, were a serious breach of the law. It is not a question of human rights, religion or nationality." China's official Xinhua news agency accused "the Tibetan separatist clique based abroad" of providing arms and inciting the protest. Though some foreign observers fear that the anti-Chinese struggle inside Tibet has entered a new stage of sophistication in which stolen and smuggled arms have become available to dissidents, foreigners who were present last week said they saw Tibe-





tans use no weapons except stones and slingshots.

From his headquarters in Dharmsala in northern India, the Dalai Lama reacted more in sorrow than in anger. In a statement commemorating the 30th anniversary last week of the 1959 uprising against Chinese rule, which culminated in his flight from Tibet, he paid tribute to his people's struggle. "We honor more than I million Tibetans who have died as the result of four decades of Chinese occupation," he declared. "No amount of repression, however brutal and violent, can silence the voice of freedom and justice." A statement issued later by his government-in-exile in India, where the Tibetan community numbers 95,000, denounced Beijing's imposition of martial law and expressed "fear that the Chinese will use this as an excuse to resort to more repressive methods."

The Tibetan struggle has taken on new urgency in recent years in the wake of the Chinese government's policy of as-







similation and economic reform, which Tibetans regard as outright colonization. The use of Chinese in Tibetan schools and the resettlement of hundreds of thousands of Han Chinese bureaucrats, traders and others in the region, not to mention the permanent presence of an occupying army, threaten to annihilate Tibet's non-violent and spiritually rooted culture.

Even population estimates are shot through with political overtones. Exile sources maintain that an estimated 7.5 million Han Chinese have been settled over the years alongside 6 million Tibetans in the area known historically as Tibet—a territory roughly twice the size of present-day Tibet, which the Chinese refer to as the Tibetan Autonomous Region. According to China's official 1988 population figures, on the other hand, the Autonomous Region's total population is only 2.02 million, of whom 1.93 million are ethnic Tibetans.

Tibetans are nonetheless convinced that they have become a minority in their

Before the advent of martial law: demonstrating Tibetans march through Lhasa while others, in masks, gather around a bonfire. Police, above, seize a person outside a Buddhist temple. A Chinese man, right, is assaulted.

own land. Says Lhasang Tsering, head of the militant Tibetan Youth Congress, an exile group based in New Delhi: "Ours is no longer a struggle for independence, it is a struggle for survival." Fortifying this view, a three-year study conducted by the Dalai Lama's information ministry has claimed that in the four decades preceding 1983, 1.2 million Tibetans died "as a direct result of China's invasion and occupation of Tibet."

Prompted by fear that Tibetan culture may become a "relic of a noble past." the Dalai Lama last year tempered his demands for independence and proposed that Tibet become "a self-governing democratic political entity in association with the People's Republic of China." The compromise, he explained in a message



"You Have to Attack the Fire"

From his place of exile, the mountain town of Dharmsala in northern India, the Dalai Lama spoke with TIME New Delhi bureau chief Edward W. Desmond last week, discussing the unrest in Tibet. Excerpts:

On the killings in Lhasa. I feel sadness, but I try to look at other aspects as well. In the long run, in terms of world sympathy, it may help us.

On reported Tibetan attacks against Chinese. I do not believe the Chinese statement [that Tibetans used guns]. But if that did happen, it is absolutely wrong. There is no justification for violence—to use guns, or to stone people, or to burn houses. If Tibetans do those things, then the Chinese will find it very easy to use it as an excuse for a clampdown.



HIs Holiness, the Dalai Lama

On the expulsion of foreigners. Now there are no more witnesses. So the Chinese have a free hand. I really worry that [Tibet] might become something like a slaughterhouse. But I believe this is a sign of weakness. The Chinese cannot tolerate criticism because they know they are guilty.

On the impatience of young Tibetans with the concept of nonviolence. So far, I have won the argument [for nonviolence], but in the future I do not know.

On the reaction of the West. Another piece of sadness. A British paper said that if these killings had happened in one of the Soviet republics, Western nations would immediately have condemned them. But since this took place in Tibet, and the Western countries regard China as very important, they are silent.

On his continued optimism about Tibet's future. I feel the basic human spirit is gaining the upper hand in the world. China has changed much. As time passes, the government seems compelled not to act as arbitrarily as it has in the past. Already, among the Chinese, there are growing numbers who view Tibet as something different from China. They are aware that Tibetans have their own culture and history, and that it may be better to let them manage their own affairs.

On the progress of the Tibetan cause. Last year the Chinese indicated that they were willing to talk about the future of Tibet. That means, in my view, not a change of policy but a move closer to truth. Human beings respect truth in the long run. Our hope remains that there will be talks. We cannot expel the Chinese, and nobody will come to help us expel the Chinese. It is like the Tibetan saying, "Even though the fire burns you, you have to attack the fire."

On changes in Tibet over the past 30 years. Tibetans outside Tibet have kept their basic nature, their jovial attitude. But inside, the young people are short tempered and ready to fight. It is very sad. The Chinese Communists destroyed not only external things like monasteries and monuments, they also destroyed the basic good quality of Tibetans.

On how long it will take to achieve Tibet's freedom. Within this century more positive things may happen. If the Chinese treat us as true brothers and sisters, as they say in their documents, then there is no problem. I am not much concerned about political status. After all, human history and national boundaries are always changing. The most important thing is the actual benefit for the human community. Maybe it is better that we remain with the Chinese, but only if we are genuinely equal.

to the European Parliament in Strasbourg last June, represented "the most realistic means by which to re-establish Tibet's separate identity and restore the fundamental rights of the Tibetan people while accommodating China's own interest."

After initially rejecting the proposal, Beijing announced that it was willing to open negotiations. The Dalai Lama chose Geneva as the site for the talks and suggested they begin in January. But Beijing raised objections to the composition of the Tibetan delegation, mainly because it included members of the Dalai Lama's Cabinet, and the meeting did not take place. Last week Tashi Wangdi, head of the Dalai Lama's negotiating team, pressed Zhou Xingxing, China's counselor in New Delhi, to reconsider the idea. Said Wangdi: "Unless we find a cure for the disease, the symptoms will keep erupting. The recent disturbances reinforce the urgency for talks."

There is little doubt that Tibetans are becoming restive and that attitudes are hardening, particularly among the younger generation. The Dalai Lama's Strasbourg proposal sharpened divisions between moderates, as represented by his political group, and the militants of the Tibetan Youth Congress, who want full independence for their homeland. Says Wangdi: "If China continues to dillydally, out of sheer frustration and disappointment the entire silent majority will swing in favor of the radical point of view."

ibetans of all political persuasions are disappointed by what they see as a betrayal by the rest of the world, which has long recognized China's claim to sovereignty over Tibet. "No one wants to stick his neck out for us because our adversary is so powerful," says the Youth Congress's Tsering. Even India, which has been at odds with China for years over an unresolved border dispute, is improving its ties with Beijing and making an effort not to do anything to antagonize the Chinese. One of the few nations that spoke out in behalf of the Tibetans last week was the U.S., which condemned China's "unwarranted use of lethal force." Beijing routinely rejects such complaints as interference in its internal affairs.

Thus the standoff continues, with the inevitable promise of more violence to come. Despite Tibetan reverence for the Dalai Lama, many diplomats fear that his ability to persuade his people to forsake their goal of independence is being eroded by the unrest of the past 18 months. The grim prospect is that if Beijing fails to pursue a negotiated settlement, the cycle of repression-violence-repression will be repeated, thereby dashing hopes for a peaceful solution and, for that matter, any hope of a return to the nonviolent ways that once made Tibet a citadel of the spirit. - Reported by Jaime A. FlorCruz/

Chengdu and Anita Pratap/New Delhi





NTT's former chairman joins the fallen: Shinto, center, escorted by Tokyo prosecutors

JAPAN

The Scandal That Will Not Die

Another round of arrests threatens Liberal Democratic stability

Three dark-suited men emerged from a car outside Tokyo's Ikebukuro Hospital early last week and disappeared into the building. Several hours later, they returned with a grim-faced, silver-haired man and prodded him into a waiting sedan. Tokyo district prosecutors had arrested Hisashi Shinto, 78, the former chairman of Nippon Telegraph & Telephone, one of Japan's largest corporations. The detention marked a fresh turn in the Recruit scandal, the spreading stock-for-influence deal that threatens to scuttle the government of Prime Minister Noboru Takeshita.

Shinto, who entered the hospital to take refuge from the inquisitive press, a common practice in Japan, was the ninth person in less than a month to be taken into custody in connection with the affair. The former NTT chairman, who resigned his post last December, stands accused of taking about \$70,000 worth of bribes in the form of stock profits from heavily dis-

counted shares in Recruit Cosmos, a real estate subsidiary of the Recruit Co. In return, he allegedly helped the fast-growing Tokyo-based employment-and-communications firm break into the lucrative telecommunications business. His long-time former aide, Kozo Murata, 63, was detained on similar charges, and by midweek two others were added to the arrest roster on bribery charges.

What made Shinto's detention especially significant was the fact that the alleged bribe changed hands in the name of his aide, Murata. Similarly, aides of former Prime Minister Yasuhiro Nakasone have admitted reaping huge stock profits from Recruit. Nakasone was in office when the questionable stock transactions took place, between 1984 and 1986.

Though Nakasone has denied any wrongdoing, opposition parties have repeatedly demanded that he testify before the Diet in connection with the scandal. Critics want to know, for example, what

role, if any, Nakasone had in NTT's purchase of four supercomputers made by the U.S. firm of Cray Research; Recruit was the consignee for two of the computer systems. In early 1987, white still in office, Nakasone reaffirmed Japan's intention to buy U.S. supercomputers to alleviate the chronic trade imbalance between the two countries. Prosecutors are investigating whether Nakasone influenced NTT to buy the U.S.-made supercomputers.

The latest arrests have increased pressure on Takeshita: if he rejects demands that Nakasone testify before the Diet, normal Diet business—including passage of the \$479.8 billion budget for fiscal 1989—could be blocked; if he yields, he will outrage Nakasone's 88-member faction in the ruling Liberal Democratic Party, and the government could come apart. "Takeshita is in a real fix," says Masaya Ito, a former personal aide to the late Prime Minister Takeo Miki and now a political commentator for newspapers and television. "He can't make a decisive move in this extremely risky political tugof-war. The opposition parties have made the budget hostage to their demands."

While the Liberal Democrats hold a 116-seat majority in the Diet, they are reluctant to use their muscle because they fear the effect of such a move on Upper House elections, scheduled for June or July. How the Prime Minister intends to cope with the spreading scandal remains a mystery, but he has repeatedly said he will not resign. All likely candidates for the succession, including party Secretary-General Shintaro Abe and former Finance Minister Kiichi Miyazawa, have been touched in some fashion by the affair. Says a highranking party official: "We can't put on a new tire because all the spare tires are flat." At week's end prosecutors were said to be preparing to question aides to high-ranking L.D.P. politicians, including Nakasone. —By Seiichi Kanise/Tokyo

EGYPT

Odious Odor At Abu Zaabal

The poison-gas issue—again

The basic facts were quite familiar. For the second time in three months, a North African country stood accused of obtaining equipment from a European company in order to build a plant capable of producing poison gas. Except that this time the supplier was not a West German firm but a Swiss concern named Krebs A.G., and the customer was not Libya but a friend of the West's, Egypt.

The New York Times reported last

week that Washington was worried about Egyptian plans to upgrade its chemical-weapons capability by building a gas-producing plant at Abu Zaabal, north of Cairo, with materials it bought from Krebs, a Zurich-based engineering company. Egypt is believed to have the capacity to produce nerve and mustard gas; the Abu Zaabal plant was described as part of a military-industrial complex that is scheduled to be the future site of a joint Egyptian-American assembly line for the U.S.-designed M-1 battle tank.

The day the story broke, Krebs announced that it had stopped deliveries to Egypt, following an order issued by the Swiss government on March 2. The company also said it believed the equipment it

shipped to Egypt would be used only to produce pharmaceuticals. Egyptian President Hosni Mubarak tried to defuse the issue by denying that his country had any plans to make chemical weapons. "This is the first I've heard of it," he said. "We are against chemical weapons and, of course, don't build any such factories."

Accusations and denial left the U.S. with a dilemma: how to stand by its strong opposition to chemical weapons without alienating a key ally in the Middle East. Said State Department spokesman Charles Redman: "The Krebs Egyptian project ... again illustrates the difficulties of controlling production technologies that have dual uses, both legitimate civilian uses and potential [chemical-weapons] uses."

HOSTAGES

Piecing Together the Lost Life of Terry Anderson

The U.S. journalist begins his fifth year in captivity, a coin in a cruel human barter that no one has been able to redeem

BY SCOTT MACLEOD

C hained to a radiator in a bare, dank room, he never sees the sun. When his captors fear that a noise in the night might signal an impending rescue attempt, he is slammed up against the wall, a gun pressed to his temple. Each day he has just 15 minutes to shower, brush his teeth and wash underwear in the bathroom sink. His bed is a mat on the floor. A fellow hostage tries to escape and is beaten senseless by guards. Another attempts suicide. One day, reaching the edge of his own sanity, the prisoner begins to pound his head against a wall, stopping finally as blood oozes from his scalp.

Life has been like that for Terry Anderson ever since March 16, 1985, when the chief Middle East correspondent for the Associated Press was kidnaped in West Beirut. The men who grabbed him were zealots from Hizballah, a group of Shi'ite Muslim fundamentalists that have also abducted other Westerners. Over the past few years Hizballah, in some cases as the result of secret negotiations, has released three Americans, ten Frenchmen and two West Germans. Others have escaped. But nine Americans, three Britons

and one Italian remain in captivity. Among the Americans, none has been held longer than Anderson. Here, pieced together from accounts by former fellow hostages, is a glimpse of the life he has led for four long years.

In the first hours after his capture. Anderson finds himself tightly blindfolded and shackled on a cot in a dingy apartment in Beirut's war-ravaged Shi'ite slums. He can hear the roar of jets: Beirut airport is nearby. The former U.S. Marine is stunned and sobs constantly, angry and fearful that the kidnapers intend to execute him. A guard bursts in and threatens him merely because the bedsprings creaked.

Anderson is lost in the bowels of Beirut, but he is not alone. In the same 12-ft. by 15-ft. bedroom, Father Lawrence Martin Jenco of Catholic Relief Services (kidnaped Jan. 8, 1985) peers from under his blindfold to glimpse the new arrival. A month later the two are led to the basement, which is partitioned into cramped cells with plasterboard, where they are held with other Americans: William Buckley, Beirut station chief of the CIA (kidnaped March 16, 1984), the Rev. Benjamin Weir, a Presbyterian missionary (kidnaped May 8, 1984), and eventually David Jacobsen, director of American University Hospital (kidnaped May 28, 1985).

Buckley is treated with particular cruelty. He catches a cold that develops into pneumonia. "Mr. Buckley is dying," Father Jenco pleads. "He is sick. He has dry heaves. Give us liquids." On June 3, 1985, Buckley squats on the tile floor believing that he is sitting on a toilet; food fantasies fill his head. "I'd like some poached eggs on toast, please," he mumbles. "I'd like an order of pancakes." That night Buckley starts to grunt strangely, and the others realize they are hearing the rattle of death. A guard drags Buckley's body away. The first time Anderson gets a letter out to his family with the permission of the captors, it contains his last will and testament.

Then out of the blue comes hope. In June 1985, TWA Flight 847 is hijacked and 39 American passengers are being held. A package deal is in the works, says Hajj, the chief guard. "Your case is cooked; you will be going home." Nothing happens.

The guards, however, improve living conditions for Anderson and the others, apparently fearing they might die like Buckley. "Christmas in July" brings dinner of Swiss steak, vegetables and fruit, medical checkups by a kidnaped Lebanese Jewish doctor (subsequently executed) and the chance to start worshiping together. Anderson, once a lapsed Catholic whose faith is growing stronger by the day, gets permission from Hajj to make his confession to Father Jenco. Later, the hostages are allowed to hold daily services, one day Catholic, the next Protestant, in their "Church of the Locked Door." They celebrate Communion with Arabic bread. Risking a beating, Anderson tells the guards to shut up when they mock the Christian service.

Eventually the captors permit their prisoners to be together all the time and to remove their blindfolds when the guards are out of the room. Another new hostage has arrived, Thomas Sutherland, dean of agriculture at American University (kidnaped June 9, 1985). One day in September, Hajj raises everybody's hopes again by announcing that a hostage will finally be released; they must choose for themselves who will go free. "Think it over," he commands as he walks away.

The hostages drag their agonizing discussion late into the night. Pastor Weir, Father Jenco and Sutherland do not put themselves forward. But Anderson nearly

takes a swing at Jacobsen as the two men engage in a contest to be chosen. Anderson wins the vote, but Hajj refuses to abide by the decision. "Terry Anderson will not be the first to be released," he snaps. "He might be the last one."

A few nights later, Hajj tells Pastor Weir to get ready to go home.

On Christmas Eve 1985, the hostages hear on the radio that Church of England envoy Terry Waite has failed to gain their freedom and has returned to London. Anderson is crushed. Father Jenco tries to sing carols but is too depressed. Jacobsen draws a crude Christmas tree on a piece of cardboard and sticks it on the wall.

Each morning, fighting boredom and depression, Anderson obsessively cleans the sleeping mats and takes spirited 40-minute walks around and around the room. When he fashions a chess set from scraps





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of tinfoil, the guards take the game away, claiming it is un-Islamic. Anderson takes French lessons from Sutherland and stays up all night reading the Bible and Charles Dickens' novels, provided by the guards.

From memory Sutherland, a former Glasgow Ranger professional soccer player, recites the poetry of his beloved Robert Burns. Father Jenco takes the hostages on an imaginary tour of Rome and the Vatican. Anderson makes a deck of cards from paper scraps and they play cutthroat games of hearts.

Like sophists, Anderson the liberal Democrat and Jacobsen the Reagan Republican constantly provoke each other into arguments to keep their minds alive. But often, their tempers flare for real.

More than the others, Anderson challenges the guards, although for some reason he is beaten less frequently. He goes on a seven-day hunger strike when they sudden-

ly ban the radio and the occasional copies of the International Herald Tribune. He does not know it, but the news blackout is imposed so he will not learn of the deaths of his father and brother back in the U.S. He does find out, however, that since his kidnaping his second daughter, Sulome,

has been born.

In July 1986 Father Jenco is freed. Jacobsen goes home in November, but the public revelation of a secret U.S. armsfor-hostages deal with Iran torpedoes further releases. Two months later, Waite the mediator is kidnaped.

Holder of the Hostages

Terry Anderson's chief Jailer is Imad Mughniyah, a 38-year-old Shi'ite fundamentalist radical who, according to some accounts, is a more dangerous terrorist than the notorious Palestinian renegade Abu Nidal. According to Washington officials, Mughniyah, a Lebanese, is an official of the pro-tranian Hizballah organization and has been involved in bombings, like the 1983 suicide attacks on the U.S. embassy and the U.S. Marine barracks in Beirut, as well as aerial hijackings. He is a prime suspect in the 1985 skyjacking of TWA Flight 847, in which a U.S. Navy diver was murdered. U.S. officials also charge that he has been involved in the kidnapings of 31 Westerners since 1984 and that he holds most of the 13 still in captivity. For his activities, he uses cover names like Islamic Jihad and Revolutionary Justice Organization.

The grandson of a Shi'ite mullah, Mughniyah went through a training program with Yasser Arafat's Fatah faction of the Palestine Liberation Organization. Though he was a high school dropout, he excelled at the terrorist's craft, impressing his P.L.O. commanders with his boldness and his skillful handling of explosives and weaponry. Eventually, however, Mughniyah fell out with the Fatah organization, and in 1982, after Israeli troops invaded Lebanon and occupied his home village, he joined the more radical Hizballah, or Party of God. He rose quickly in its ranks, and as Hizballah security chief may now be its most powerful figure. He continues to hold on to the hostages despite public pleas by Hizballah's spiritual leader, Sheik Mohammed Hussein Fadlallah, that they be allowed to go free.

Mughniyah's original motivation was to avenge the mistreatment of Shi'ites in Lebanon and to vent his hatred of the U.S. and Israel. But U.S. sources say he has become obsessed with trying to secure freedom for his brother-in-law Mustafa Badreddin and 16 other Shi'ites jailed in the oil-exporting country of Kuwait following a 1983 bombing campaign he orchestrated. Mughniyah launched his subsequent kidnaping and hijacking spree in order to spring the 17 in a prisoners-for-hostages swap. Among his victims: William Buckley, the CIA station chief, who died in captivity.

Mughniyah is reportedly funded by Tehran and is considered Iran's man in Lebanon; his mentors in Iran include conservative leaders now locked in rivalry with would-be pragmatists. Even so, Mughniyah has been forced to free several American, French and West German hostages when it served Iran's interests. His personal demands have never been met.

> Feeling increasingly abandoned by his government. Anderson spends much of 1987 in isolation. In December he gets a new roommate, French diplomat Marcel Fontaine (kidnaped March 22, 1985). Anderson is denied permission to send out a videotaped Christmas message to his family. Not long after, while doing his calisthenics, he walks over to a wall and starts beating his head against it.

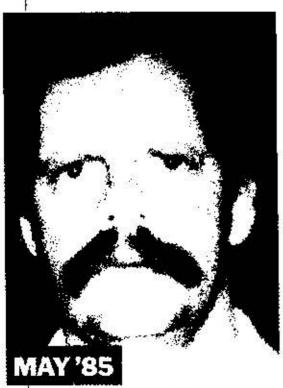
The ordeal takes its toll on others as well. Sutherland, who went to Beirut passionately hoping to help Lebanese farmers. is treated far worse than his fellows. He tries to kill himself by putting a nylon sack over his head. A more recent kidnap victim. Frank Reed. director of the International School in Beirut (kidnaped Sept. 9, 1986). attempts to escape but is caught. The guards beat him viciously and break his spirit, leaving him prostrate on the floor.

In 1988 Anderson and Fontaine are moved to a heated apartment and begin getting hot food. Are they being fattened up in preparation for their release? Despite the constant disappointments, Anderson is determined to think about his future. He ponders quitting journalism to take up farming or start a home for juvenile delinquents. At last on May 3, after more than three years as a hostage, Anderson's time appears to have come when a guard tells him, "Prepare your things, your clothes, your pajamas." Anderson feels bad for Fontaine. knowing too well what it is like to be left behind. At midnight they come and take Anderson away. Two

hours later, Fontaine learns that it is he, not Anderson, who is being freed.

Five months ago, Anderson's most recent message to the outside world is put in a videotape. Signing off, Terry Anderson tells his family, "Kiss my daughters for me. Keep your spirits up, and I will try to do the same thing. One day soon, God willing, this will end." - With reporting by William Dowell/Paris and Edwin M. Reingold/Los Angeles

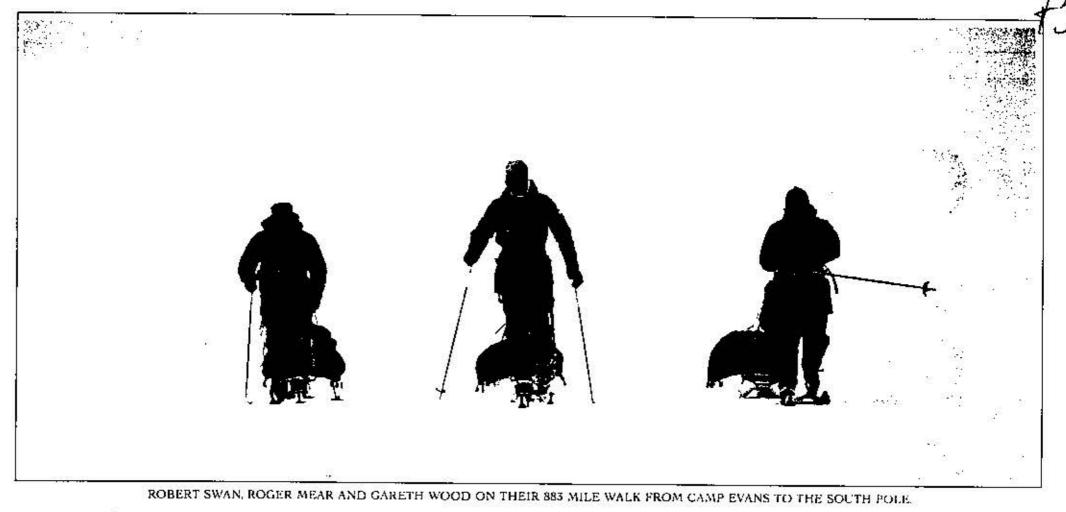
Anderson in A.P.'s New York office in 1984: Polaroids and a videotape taken by the captors chronicle his travail











Walking to the Pole in the footsteps of Scott.

Many schoolboys will have read the Antarctic journals of Captain Scott. And some, like the 11year-old Robert Swan, may have vowed to retrace their hero's journey - one day. The unusual thing

about Robert is that, 18 years later, he did follow Scott. With two companions he walked to the South Pole.

In 1911 the Scott team had established supply camps along their route. Swan, Mear and Wood hauled their provisions on sledges weighing, at the start, 353 lb to a man.

The team's navigational equipment was no more elaborate than Captain Scott's. Yet they trekked accurately across the 400mile Ross Ice Shelf, up the 125-mile long Beardmore Glacier, ascending 10,000 feet to the 350-mile Polar

ROSS ICE SHELF Scott reached South Pole 17th January 1912 SOUTH POLE

SCOTT'S ROUTE RETRACED 74 YEARS LATER.

Plateau. It was a journey of 883 miles, accomplished in 71 days.

There had been no guarantee of success, even after seven years' preparation. "We could not go into this," said Swan, "thinking that we would win. It was up to the Antarctic to choose to let us through."

The Antarctic let them through, step by painful step. They had to learn a manner of walking that used minimal energy. Energy came only from the food they carried, and weight was critical.

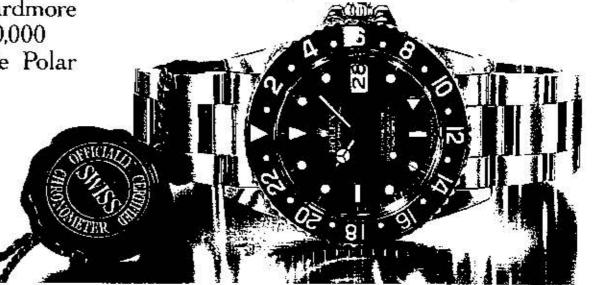
Each night in their small tent, the men would re-read entries from Scott's diaries. But these were now vastly more than a boyhood inspiration. They were being relived mile by mile in spite of blizzards, perpetual sub-zero temperatures, twisted ligaments, agonising blisters and incessant hunger.

Reaching the South Pole at last was a realisation of their hope that "by limiting the means we use to retrace Scott's journey, we can fully rediscover isolation, commitment and adventure".

"Limiting the means" excluded radio. And with no radio - there could be no time-checks. For vital navigational purposes, Swan, Mear and Wood each relied on his Rolex Superlative Chronometer. Even one minute out would have meant one mile out - and they were aiming at a point in an area the size of the USA.

of Geneva

As Robert Swan told us, "If my Rolex hadn't been reliable, I'd ROLEX be dead. It's as simple as that".



THE ROLEX GMF-MASTER CHRONOMETER IN STAINLESS STEEL. ALSO AVAILABLE IN 18CT YELLOW GOLD OR IN STEEL AND 18CT YELLOW GOLD.

One Bear Of a Soviet Politician

Bumped from power by conservatives, **BORIS YELTSIN** is campaigning hard to avenge that "mugging" and improve on Gorbachev's reforms

Ever since he was brought by Mikhail Gorbachev into the Soviet Politburo in December 1985, no Soviet political figure has been as irreverently outspoken about Soviet life or as ambitious to change it as Boris Yeltsin, 58, a heavyset, 6-ft. 2-in. man from Sverdlovsk in the Ural Mountains. Appointed to clean up the corrupt Moscow party committee, he quickly fired hundreds of bureaucrats and barnstormed the city, criticizing food shortages and general incompetence. But his reforming zeal and a bitter public debate with Politburo conservative Yegor Ligachev led to his public censure and ouster from the Moscow party position in November 1987.

But Yeltsin has refused to disappear. Banished to a deputy-ministry position in the construction industry, he is now attempting the unheard-of in Soviet life: a political comeback. Widely popular on the streets of Moscow, Yeltsin has got himself chosen as one of two candidates in the March 26 nationwide runoff for the brand-new Congress of People's Deputies. Today he campaigns daily around the city, exciting cheering crowds and recruiting campaign workers at every stop. He interrupted the frenzy of his quest and granted an interview in his Moscow office with TIME Washington correspondent David Aikman.

Q. You are running for election in the Moscow district as if your life depended on it. Why does winning it mean so much to you?

A. My candidacy was proposed by several hundred organizations in 50 different constituencies around the Soviet Union. But the Moscow constituency is the Moscow constituency. An elected representative will find it easier to deal with issues if he has been elected by this particular constituency, constituency No. 1 in Moscow.

And during the dramatic events of the fall of 1987, I was accused of not being acceptable to Muscovites. I think it is now objectively possible to find out whether this is the case.

Q. Why is this so important to you?

A. Why? If you were mugged on the street and robbed of your jacket, it would also be important to you that your robber was identified and captured.

Q. If you get elected as a representative for Moscow, how will you view your role?

A. It will be one thing if I am just a representative at the Congress and quite another if I am in the permanent Supreme Soviet as a sort of professional politician—to use your vocabulary, though we don't have such terminology—in which case my functions will be different and ought to be looked at differently. As to actually becoming a member of the Supreme Soviet, I don't rate my chances very high.

Q. Why not?

A. As I see it, the people who make the proposals are not very enthusiastic about it.

Q. Who, for example?

A. The political leadership.

Q. Why is the political feadership opposed to you?

A. You can't explicitly call it opposition. I give full support to the general direction of perestroika, to the country's foreign policy and so on. But I have my own views on matters of political tactics that differ slightly from the position of the official leadership. In this respect, there is a certain tension in our relationship, but I insist on certain limits to it.

Q. Should the President of the Soviet Union be chosen by a direct, popular vote?

A. I think he should be. This is my opinion. I think elections should be universal, equal, by direct and secret vote between alternative candidates, from the bottom to the top, including the election of the Chairman of the Presidium of the U.S.S.R. Supreme Soviet.

Q. Would you be willing to run for this office?

A. I am not an alternative candidate to Gorbachev. I accept Gorbachev as a leader.

Q. What if there were no Gorbachev?

A. Why discuss it? Gorbachev is there.

Q. You have said there was a "Mafia" that tried to block your reforms when you were first secretary of the Moscow party committee. How did it operate?

A. I think you in America have quite enough experience in this area, so you must know its methods better than I do. The Mafia in the Soviet Union is a long way from being as strong and influential as it is in America. Our Mafia does not have as much experience as yours.

Q. What policy differences do you have with Gorbachev?

A. None in foreign policy, but some things in domestic policy. The official view is that perestroika must be pushed forward in every direction, that it must embrace everything. But I believe we don't have enough options and resources for this. We are not mature enough. We have not yet gone through psychological restructuring in regard to the democratization of society. So we have to move forward by stages. I favor this approach. One stage yields one result, then the next stage yields another, thus forming a chain of restructuring. Of course, one of the first links in the whole chain is that of the political system. Starting here, we must then improve living standards and concentrate our resources on this, even if it





"If you were mugged on the street and robbed of your jacket, it would also be important to you that your robber was identified and captured."

means reducing investments, financial allocations or expenditures in other areas, so that people can come to believe in the process. Psychologically, we have certainly started to live slightly better, and that's perestroika. But by heading off in every direction at once, as we have been doing for $3\frac{1}{2}$ years, we have hardly made any progress at all as far as the standard of living is concerned.

Q. Perhaps things have got even worse?

A. Perhaps they have in some regions, though it depends where.

Q. Why is the Soviet economy in such a mess?

A. That's too broad a question. It is probably because we didn't fulfill the slogans we proclaimed in 1917: "Power to the Soviets," "Land to the peasants," "Factories to the workers," "Bread to the hungry." Authoritarian leadership and therefore a lack of democracy have led to a certain apathy among the people, to a sort of civil nihilism, a skepticism. And to all this we must add the mistakes of the cult of personality. That's just one part of the problem.

Then we have been constantly criticizing the competitiveness and the market process of your own system to the point of excluding the very word market from any discussion of our country. A market can be a capitalist or a socialist one, but it is still a market. So here we have wasted a lot of time, not to mention all that has been sacrificed and the people and the resources we have lost. Also, the system of leveled-down wages has led to a loss of interest in their work on the part of both workers and managers. Let's say that somebody has set a record, has fulfilled not one daily quota but five. His wages ought to be raised by a factor of five, but instead, there is an immediate tendency to pay him not five times as much money but three times—"There, so much for your wanting to get rich."

Q. Is there something in the Russian character that hinders progress in this country?

A. I think the problem derives from conditions that do not allow the Russian character to express itself. The Russian character is no weaker than the American character. We also have people with a flair for business, but, of course, in the matter of entrepreneurship, some of your executives have made quicker progress, thanks to entrepreneurship itself. We only started talking about socialist entrepreneurship in the past few years, thinking it a possible

way out for ourselves. "Come on," we said, "move and think faster, and you'll get more profit for your enterprise."

Q. One of your main adversaries in the Politburo is Yegor Ligachev, chairman of the agricultural commission. What does he represent to you?

A. I must correct you. He is not my adversary; he is my opponent.

Q. What is the difference?

A. With an adversary one fights a duel or settles scores in some form or other, by military force, for example. But Ligachev is my opponent. We simply have different opinions, different points of view on certain questions of tactics. Well, of course, I think he is more conservative, if not to say outright conservative, to put it simply. That is why I think this complicates the process of perestroika. There are, however, some forces behind him. They cannot be defined; they are not organized; you can't identify them as Ivanov or Petrov, but they exist. Not to the extent of representing an opposition to Gorbachev, but a slowingdown factor.

Q. How did Ligachev slow down perestroika?

A. In hidden ways. I would put forward one proposal, and he would advance the opposite point of view. In regard to social justice, he considers there are no problems in this area, but I think there are problems that keep the moral fabric of society in a state of tension. Remove this tension, and the sprouts of perestroika will start growing.

Q. What do you think about a multiparty system?

A. It's a difficult question. We have not yet removed the locks from all the

doors, locks that are sealed with sealing wax. It's my view that this issue ought to be open for discussion. That would be the first step. We are not ready today; I mean we are not ready today to take a decision on this tomorrow.

Q. You have spoken out against privileges for party functionaries. But didn't you take advantage of them yourself?

A. I was appointed as a deputy minister, thrown down from the ninth floor to the fourth floor of this building. About a day later, somebody turns up offering me privileged access and other products. I didn't let him take more than two steps inside my office. I said to him. "You're not to blame. I understand why you were sent to me, but I have principles. I am against such things. Don't ever come here again."

Of course, I have not refused all the privileges, to be quite honest. It is one thing to refuse foodstuffs, access to special stores and various services, but I have not refused an official car, a dacha, a small wooden house in the area where ministers reside and special health services. Among other ministers, nobody else has followed this example.

Q. What inner motivation drives you when you deal with all these issues?

A. It may seem trivial to you, but I really want us to have a state that is socially just. Really. And I want to fight for this.

Q. That is not trivial. Have you had this conviction since childhood?

A. Well, of course, but not as intensively as today. The feeling sharpened over the course of time, as I started to learn more, as I came across wide polarities in living standards. So I am a fervent advocate of social justice. It is essential for the very moral and psychological climate of society. No special means are required, but sacrifices on the part of certain kinds of people are essential. We have to sacrifice ourselves. I don't consider this a slogan. Public interests are higher than personal interests. In a month I may be elected to the Congress of People's Deputies and would therefore no longer be a minister. Today I don't know where I will find work. This doesn't bother me. Things are easier in your country. A political figure may have his own farm, some capital, a factory and he is not afraid to abandon all this for a while-and not even lose it, if he is elected to the Senate or the

House of Representatives. He can work there for a while and then go back to his property. He feels quite safe. But I don't even have a ruble saved up.

Q. Was there something very striking that happened in your life that got you going on your present path?

A. There were a number of dramatic moments in my life. For example, I decided to travel all around the Soviet Union without a kopek in my pocket, just to see it. It was in 1952. I traveled and observed during the three summer months. To have a checkbook while traveling is one thing. It is quite another to own only a student card identifying

me as a student of the Urals Polytechnical Institute. This taught me a lot, for instance, when I traveled on the roof of a railroad car without a ticket, when I spent the night in sheds with poor and homeless people. That is how I traveled, although it seems impossible to imagine.

How did I earn the food to eat? I did some odd jobs here and there, like unloading coal. I prepared an army colonel for his entrance exam in math to an institute of higher learning, and he gave me some money. Later I lived in a barracks for ten years. A shed with one corridor and rooms on either side, 20 rooms and five of us in one room, not to mention the goat that slept next to us. When someone turned on the record player in the end room [Yeltsin interrupts himself to break into verses from an old civil-war songl, the whole barracks started singing. So there has been a whole variety of different experiences in my life, unusual ones. That's without mentioning that I played in the top volleyball league for Sverdlovsk for five years. I am still keen on sports, but now I play tennis.

Q. Do you play well?

A. I can't say I do. I am no longer 20, but I could play

"We have

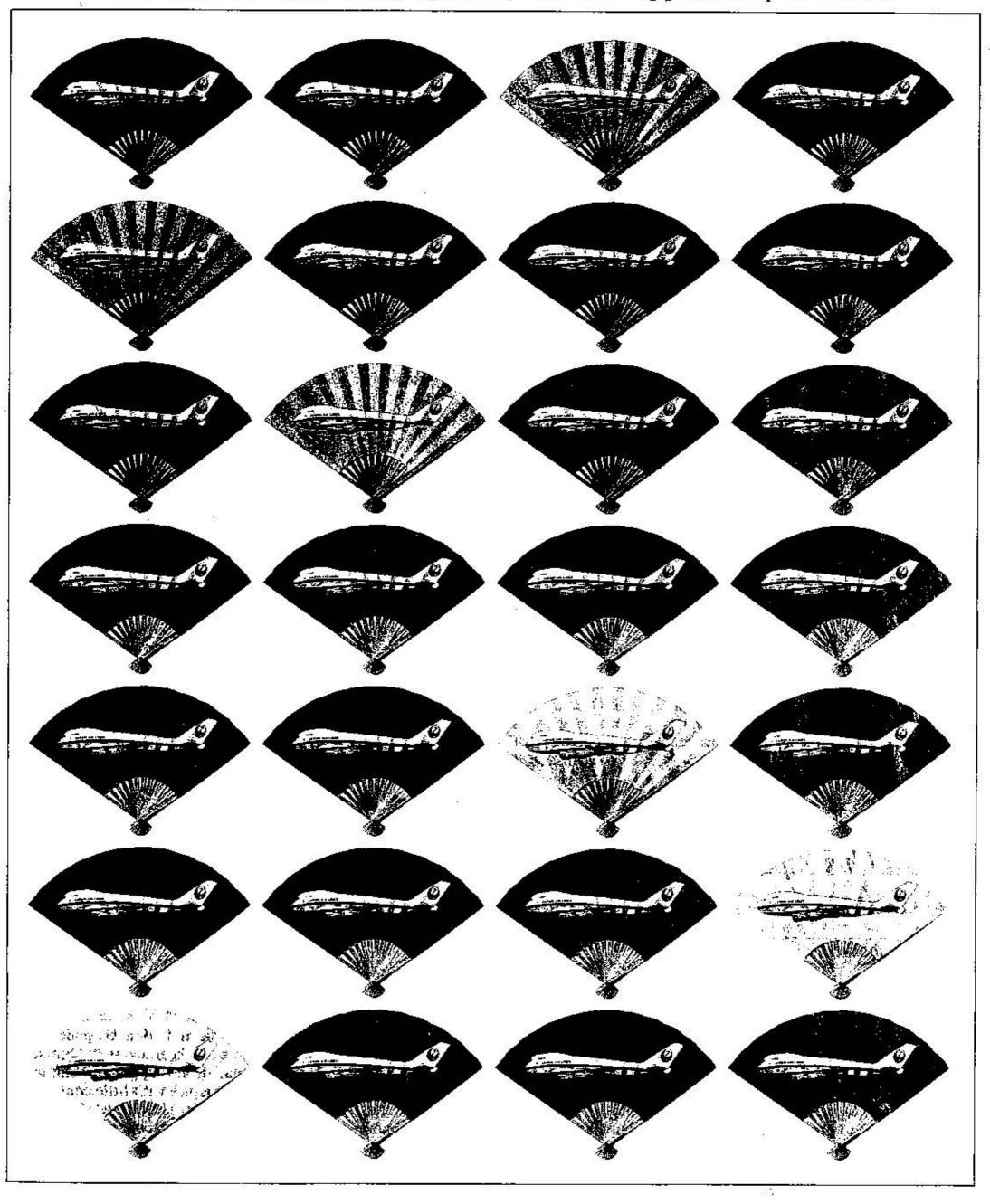
wasted a lot of

the people and

the resources

we have lost."

'The world of opportunity opens up with the opportunity of travel.'



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travellers to Japan than any other airline. We also have almost 300 flights a week from Japan to 60 destinations all over the world.



The President with Suramu and aides in the Oval Office: after a bruising fight with Congress, widespread talk of malaise

DIANA WALKER

United States

Rude Awakening

For all his experience and energy, the President is stumbling as his free-lance style leads to government by "ad-hocracy"

BY DAN GOODGAME

eldom has a President felt obliged after only seven weeks in office to deny publicly that his Administration suffers from "drift" and "malaise." But that is precisely what George Bush did at a press conference last week, reciting a list of accomplishments ranging from the savings and loans bailout to proposals for curbing air pollution. "I think we're on track," the President insisted, adding somewhat wistfully, "A lot is happening. Not all of it is good, but a lot is happening."

The biggest happening, and the worst for Bush, was the Senate's rejection of former Senator John Tower for Secretary of Defense by a vote of 53 to 47. It marked ate had spurned a President's Cabinet | dreds of key appointive posts remain unchoice, and was a clear indication of which way the power is flowing along Pennsylvania Avenue. Bush moved swiftly to stanch the bleeding by replacing Tower with Congressman Richard Cheney, a Wyoming Republican who served as White House chief of staff under Gerald Ford. Cheney is expected to win quick FBI clearance and Senate confirmation much to the relief of Bush, who declared, "Too much time has been wasted here."

All week the President was at pains to counter critics who complain that too much time has already been wasted in this new Administration. Despite Bush's extensive experience in government and his campaign boast that he was "ready on

the first time in 30 years that the full Sen- | day one to be a great President," hunfilled and crucial foreign policy decisions are on hold pending completion of some 30 "reviews."

> In economic and domestic policy, the White House has been energetic but surprisingly maladroit, hopping among major and minor issues with little continuity or follow-through. The White House has also been inattentive about managing the news and delivering its message to the public, especially when compared with skills of the Reagan Administration or even with the "theme-of-the-day" Bush campaign. "The President has given nobody the overall authority to coordinate people's efforts and make sure things work around here," explains one senior



The day of his rejection by his former Senate colleagues, John Tower drew support from daughters Penny, Marian and Jeanne

MART! KATZ

Administration official. "And there's only so much that even a President as active as this one can keep track of. The rest is falling through the cracks."

The bright side of the Tower fiasco may be that it woke up the White House. "It has got Bush's attention focused," says an Administration official. An outside adviser says, "They've got a major bailout operation under way right now." On Tuesday night chief of staff John Sununu, ever confident and combative, sought advice from an informal group of outsiders that he occasionally convenes: a dozen former Bush campaign officials and political consultants who gathered for dinner in the Roosevelt Room and discussed how to recover from the debacle.

One solace was that for all the Administration's early failings and flailings, the President's popularity outside Washington has remained strong: his approval rating has ranged between 59% and 71% in recent polls. For the time being, the President can coast on a strong swell of national contentment and hope that interest rates don't climb too high. He also continues to benefit from his obvious enjoyment of the presidency, his self-deprecating humor, his grasp of the issues raised at press conferences.

Those who have worked closely with Bush say his best traits—his energy, enthusiasm and gregariousness—can be his worst enemies, sometimes leading him to strike out in all directions at once. Bush is most effective, associates say, when he has

a strong and respected deputy to help him choose priorities and stick with them. He allowed campaign manager James Baker to play that role last fall, but in the White House he has so far denied such authority to Sununu. Bush entered the Oval Office determined to shed his image as an accident-prone candidate who needed extensive handling during the presidential race. He is equally determined not to look as sleepy or staff-managed as Ronald Reagan. As a result, Bush brought along no members of his superb campaign staff to the White House, "and that was very conscious on his part," says a former campaign official.

nlike Reagan's chiefs, Sununu does not control the President's schedule, screen his phone calls or parcel out all staff assignments. Instead, Bush deals directly and informally with a wide range of aides, Cabinet secretaries and outside visitors. A senior Administration official observes that Bush operates as "his own chief of staff" in many ways, as well as "his own best intelligence agent."

During his eight years as Vice President, whenever Bush wanted to know what was really going on in Congress or California or Cairo, the former CIA director turned not only to his staff but also to an extensive network of friends, former aides and political allies, who would sometimes report back through special phone and mail channels that skirted his

official staff. A former senior Bush staffer says he was "flabbergasted" to learn that the boss "had his own cutouts, just like a spymaster."

As President, Bush still loves to freelance. He jots dozens of private notes, reluctant to rely on dictation. He makes and takes scores of phone calls each day, talking to an army of people in and out of government, from Congressmen to civil rights leaders to cronies from the Texas oil fields. He loves marginalia: recently he extensively edited a staff memo on Soviet-American relations.

One of Bush's senior aides and longtime tennis partners, former Harvard government professor Roger Porter, has written a book called *Presidential Deci*sion Making that could describe Bush in action. Porter dubs the style "ad-hocracy," a management pattern that "relies heavily on the President to distribute assignments and select whom he listens to and when."

Among the advantages of ad-hocracy, says Porter, is that "it communicates the image of a President personally in command." Among the disadvantages: it "frequently results in jurisdictional battles," and since "ad-hocracy does not differentiate between major and minor issues," the President's agenda can easily get muddled. In an interview, Porter emphasized that "most new Presidents engage in ad hoc decision making." He sees Bush's curiosity and openness as strengths. Another Administration official adds that the easy ac-

United States

cess the President grants is "one of the reasons people love to work for him."

Still, ad hoc decisions can lead to posthaste confusion, as quickly became apparent on Capitol Hill. When the Tower nomination appeared to be doomed, White House counsel Boyden Gray, a longtime Bush favorite who often acts independently of others on the staff, pressed for postponement of a vote in the Senate Armed Services Committee. But at the same time, White House lobbyists were pressing for an early vote.

The Administration's issue agenda too is pulled in many directions at once. The peripatetic President delivers several speeches a week, and sometimes several a day, on subjects as diverse as drugs, volunteerism, government service, ethics, education, child care and the minimum wage. On the morning after his Feb. 9 budget address, he flew to Canada. Then he exhausted his staff (though not himself) on a whirlwind five-day tour to Japan, China and South Korea, including formal meetings with two dozen foreign leaders that required extensive preparation and diverted the Administration from the efforts to confirm Tower and to fill other vacant posts.

This scattershot approach makes it difficult to achieve the cynically effective manipulation of TV coverage that was a hallmark of the Reagan Administration. Sununu and White House imagemeister Steve Studdert express disdain for the obsessive attention to television and press coverage under Reagan. But a former top Reagan official points out that "control of the evening news and the headlines is one of the few tools available" for a President who was elected without any specific mandate, whose political opposition controls both houses of Congress, and who has little federal money with which to buy votes.

Richard Neustadt, Harvard's eminent scholar on the presidency, raises a more disturbing point about this—or any—new Administration's public relations efforts. Neustadt, who believes the early criticism of Bush is unfair, wonders "whether the control of the electronic media that Ronald Reagan perfected now requires that the President become more passive and turn much of his schedule over to his media planners."

When the Tower nomination foundered, an inordinate share of the blame began falling on Sununu for his lack of Washington experience and his abrasive personality. Many of the Tower snafus, however, were beyond Sununu's control, as are most of the tensions in the structure of the Bush White House. Several Administration officials expect that this spring training crisis could even strengthen Sununu's hand as Bush realizes he needs someone to run stronger interference for him. Already Sununu has adopted the system used by Bush's vice-presidential chief of staff, in which subordinates are under strict orders to report any assignment or information they receive from Bush. But now that he is President, Bush's staff and contacts are so large, and some of them so independent of Sununu, that the system often fails.

Bush and his aides seem to be realizing that the presidency is too wide a stage to control by ad-hocracy. The trick will be to impose coherence without stifling the President's spontaneity. If the White House can do so, it should be able to recover quickly from the Tower disaster. Otherwise, barely halfway to his 100-day mark, America's 41st President may become hostage to outside events and forces.

—With reporting by Michael

Duffy/Washington

On the Second Shot, a Straight Arrow

ick Cheney is perhaps the only good thing to come out of the John Tower mess. The six-term Wyoming Congressman and new Defense Secretary-designate is many of the things Tower was not: a gentlemanly lawmaker whose lowkey style belies his tenacity; a conservative who wins plaudits from colleagues in both parties; a straight arrow whose spotless personal history includes a 25-year marriage to his high school sweetheart Lynne Cheney, 47, head of the National En-

dowment for the Humanities. Cheney, 48, even passes the all-important Sam Nunn character test. The Georgia Democrat hailed him as "a man of honor and integrity."

Just as important, he is an old friend of George Bush's—a key asset in this presidency—and has ties to two other Administration power centers. While serving as Gerald Ford's White House chief of staff in 1975 and '76, Cheney worked alongside Brent Scowcroft, then as now the National Security Adviser, as well as Bush's Secretary of State James Baker, who ran Ford's 1976 presidential campaign.

After Ford's defeat, Cheney returned to Wyoming, where in 1978 he won election to the state's sole congressional seat. His path to the Senate has been blocked—Wyoming has two entrenched Republicans in Malcolm Wallop and



Dick Cheney with his old friend—and new boss. His relationships with Bush, Baker and Scowcroft may be his key assets

Alan Simpson—so Cheney has concentrated on climbing the House leadership ladder. Voted minority whip last December, he was considered a likely successor to minority leader Bob Michel. He defended the Reagan Administration during Congress's 1987 Iran-contra investigation and joined several G.O.P. colleagues in a harsh dissent from the panel's final report.

Cheney's principal drawback is his health. He had his first heart attack during his initial congressio-

nal campaign, and two more followed before he underwent bypass surgery last August. Cheney—who said last week that he got his cardiologist's O.K. to take the Pentagon job—generally shrugs off questions about his condition. "Some people are short, fat and ugly," he told the Casper (Wyo.) Star Tribune last year. "I happen to have coronary-artery disease."

His other shortcoming is a lack of experience: though he spent five years on the House Select Committee on Intelligence, he has never been a member of the Armed Services panel, has never performed military service or worked at the Pentagon. But in the wake of the Tower tempest, lawmakers on both sides of the aisle anticipate a quiet and speedy Senate review. "This time it will be a confirmation," said Senate minority leader Robert Dole, "not an execution."

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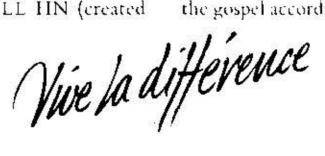
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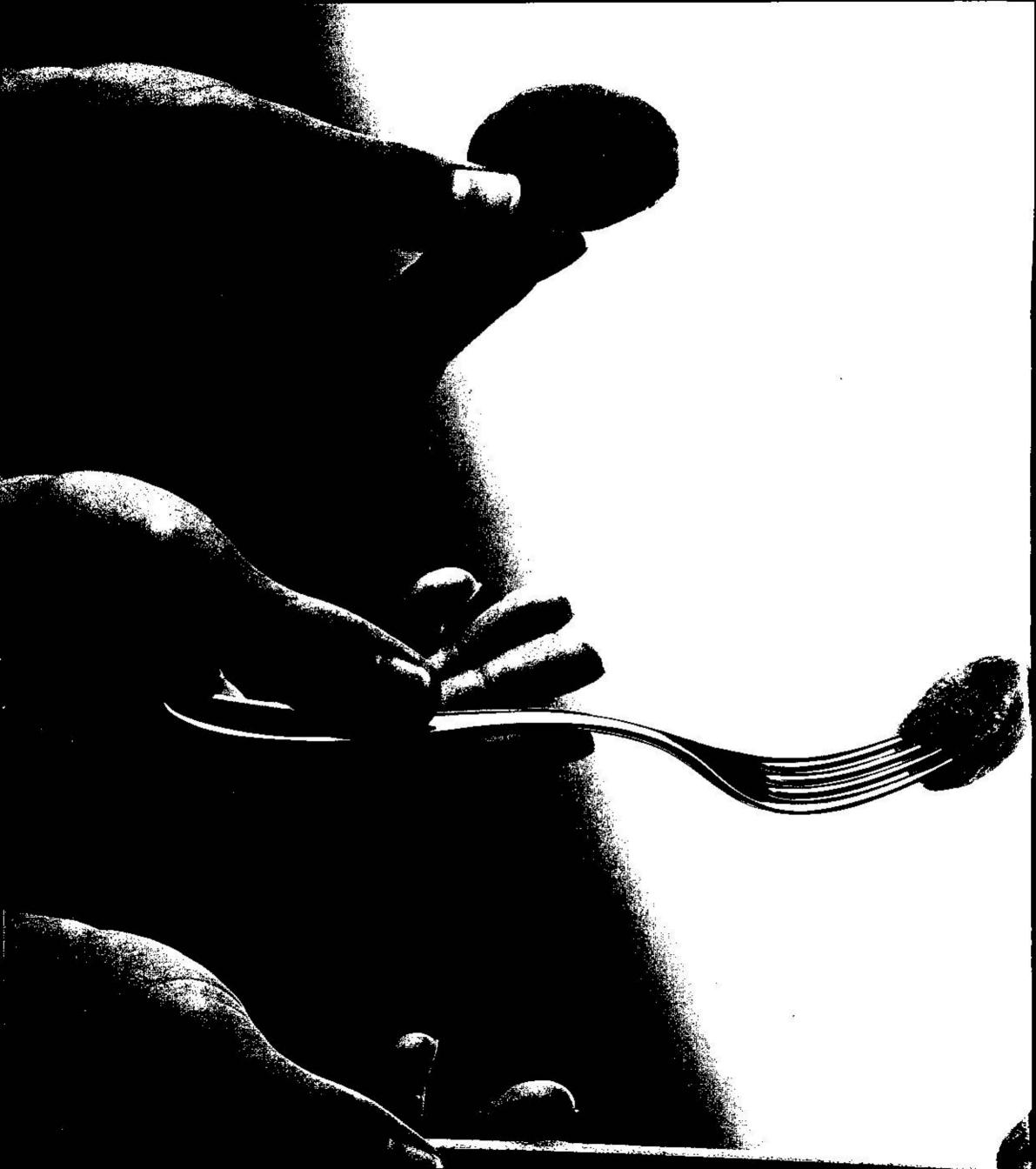
And by developing a distributed systems architecture that is completely open, modular and flexible, so it can be adapted to any conceivable organizational structure and combination of products.

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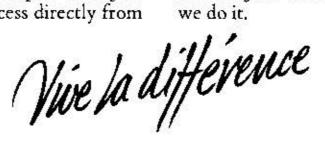
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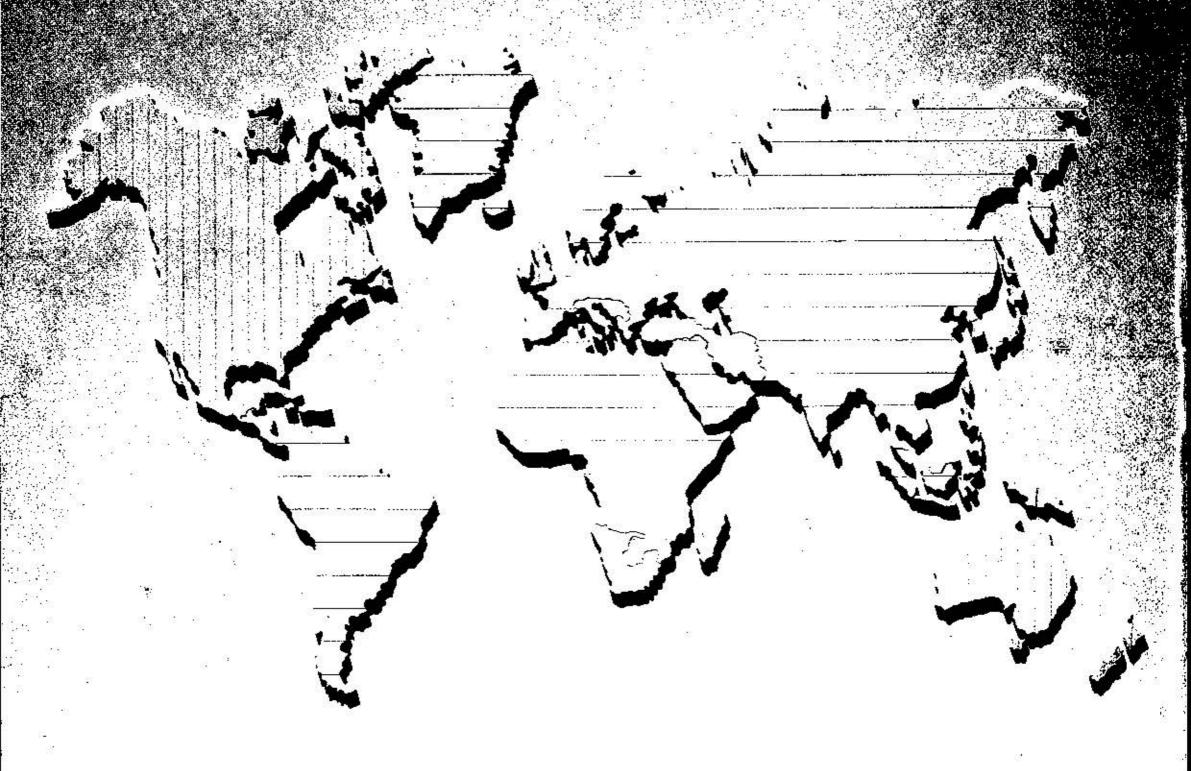
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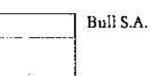
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Spying and Sabotage by Computer

The U.S. and its adversaries are tapping data bases—and spreading viruses

BY JAY PETERZELL

n early 1981, National Security Agency officials working at an intelligence facility in suburban Washington made an alarming discovery: someone had made off with a sizable haul of classified information. The thief did not jimmy open a window at the well-guarded site; instead, he gained access to a "secure" cable leading into the facility and was able

to trespass electronically. NSA officials believed the breach was the work of an East bloc spy agency.

If so, it was not the only one. A previously undisclosed series of high-tech espionage coups have been achieved by both sides. "Foreign intelligence services have gained access to classified information in U.S. computers by remote means," a former senior Government computer expert told TIME. "And we have done the same thing to them."

Last week the U.S. arrested and then expelled a Soviet military attaché for allegedly trying to steal details of computer-security programs. The incident, as well as the arrest earlier this month of three West German computer hackers suspected of spying for the Soviet Union, highlighted the extent to which rival intelligence agencies are scrambling to devise ways to penetrate one another's security systems.

A number of current or former officials say U.S. intelligence agencies have had considerable success in penetrating classified military computer systems in the Soviet Union and other countries. The rule, explains one expert, is that "any country whose sensitive communications we can read, we can get into their computers." Breaches of some Soviet computers were done not by

cracking codes but by physically breaking into Soviet military facilities, sources said.

Both the NSA and CIA have also "experimented" with the disruption of other nations' computers by infecting them with viruses and other destructive programs, according to some sources. But there is said to be concern in the intelligence community that these disruption operations could go too far and lead to retaliation.

The military's growing reliance on linked computer networks for battle management and command and control increases the danger of catastrophic sabotage by a hostile insider. That's why some U.S. security officials lie awake at night imagining scenarios like these:

An enemy agent in the Pentagon sends a computer virus through the World-Wide Military Command and Control System, which U.S. commanders would rely on in wartime for information and coordination. The virus sits undetected. When hostilities begin, the agent sends a message that triggers the



U.S. troops field-testing some portable hardware

A series of high-tech espionage coups have been achieved by both sides

virus, erasing everything in the system.

A different virus is introduced into NATO's logistics computers. Triggered just as the Soviet army marches into West Germany, the virus alters messages so that all allied supplies are sent to the wrong places. By the time the mistake is corrected a day or two later, key parts of NATO's defense line have collapsed.

Officials differ about the likelihood that such sabotage could be carried off. But the damage that can be caused by a virus was dramatically illustrated last November, when computer hacker Robert Morris injected a bug into an unclassified

Defense Department computer network, Arpanet. The virus reproduced wildly and brought research computers nationwide to a halt. "If someone at NORAD [North American Aerospace Defense Command] wanted to do what Robert Morris did at Arpanet, he could cause a lot of damage," says Stephen Walker, former Pentagon director of information systems. A retired senior military computer-security expert goes even further: "The potential for of-

fensive use of viruses is so great that I would have to view the power and magnitude as comparable with that of nuclear or chemical weapons."

With all this in mind, the Government has in recent years stepped up efforts to ensure that all sensitive computers that have links to other systems are adequately protected by encoding equipment. In addition to guarding against assaults by hostile intelligence agencies, this improved encryption program appears to have ended, at least for now, the ability of amateur computer hackers to breach secure military systems.

The KGB does, however, consider hackers an asset in its search for weak points. The West German hackers arrested last month are believed to have broken into some 30 unclassified U.S. defense computers and tried to enter 420 others. According to Clifford Stoll, a computer expert at Harvard who followed their activities for almost a year, they seemed to be assembling a "map" of links between U.S. defense computers and systematically seeking out "unauthorized gateways" into classified systems. Such gateways are created when a computer user has access to both secure and unclassified networks and is careless about keeping them separate. The hackers never did get access to classified information. The reconnais-

sance they gave the Soviets cannot be fully exploited until the KGB recruits an insider with access to a computer at one of the installations on the hacker's map.

In other words, as in Reilly: Ace of Spies, there is no substitute for a man on the scene. The relative success of computer-security officials in frustrating outside attacks has turned attention to the more serious threat from insiders—people who have authorized access to defense computers and who sell their services to a foreign government. Such an agent could do enormous damage, either as a spy or a saboteur. "There is a threat, and it's real."

says Donald Latham, a former Assistant Secretary of Defense who had primary responsibility for computer security.

NSA has figures that make the insider threat look soberingly real. An agency log of cases involving computer crime or computer espionage showed that up to 90% of known security breaches are the work of corporate or Government insiders. A 1981 study by NSA security officials estimated that I out of every 15,000 military computer key operators had sold or given away classified information in the previous 20 years. Since the military has more than 100,000 key operators at any one time, it could expect to have more than half a dozen security breaches.

Because the military operates many computers at what is called system high, in which all users are cleared for the highest level of information the network possesses, a sophisticated insider who became a spy would have considerable access. The spy could transmit information to a less closely watched part of the network—or to an outsider—without appearing to do so by using what is known as a covert channel. This involves signaling the secret message the agent wants to send in binary code by making minute changes in the speed or the order in which the "bits" of other, entirely innocent messages are transmitted. According to Walker, covert channels have been found that are capable of carrying as much as 1 million bits of information per second. Walker and other experts say they know of no cases in which U.S. covert channels were actually used.

with the problem of malicious insiders. "We have put protective mechanisms into systems that are very, very closely held so that very few people know something is keeping track," says Donald Latham. Walker and others now in the private sector are also working to develop "trusted systems" designed to make sure that users obtain only information they are entitled to see and do only things they are authorized to do.

Advocates say such systems will allow computers to be linked in more useful ways without endangering security. Says Walker: "The lack of trusted computer systems is the largest impediment to the effective use of computers in the U.S. today." Until such systems are developed and put in place, computer networks will continue to be at risk-although the threat cuts both ways. "If you believe the Soviet Union can get into our systems and change them at will," asks a former senior Government expert, "what do you think they think we can do to them?" In the hidden world of computer espionage, the battle may just be gearing up.

Bombs Across the Ocean?

An explosion in San Diego suggests Iranian retaliation

ow long is the reach of foreign terrorists? For years the FBI as well as private U.S. experts has offered a soothing answer: while Americans abroad are vulnerable, there is little danger at home. But last week Oliver Revell, the FBI's second ranking official, told a congressional subcommittee that a "hard core" of 300 among the more than 10,000 Iranians who have come to the U.S. as students bear careful watching. Some, he said, are members of Iran's Revolutionary Guard whose

ceived anonymous death threats shortly after the airliner tragedy. In July, Mrs. Rogers got a threatening call from someone she thought sounded Middle Eastern. "Are you the wife of the murderer?" the caller asked. When the Vincennes returned to its San Diego port in October, the ship's crew was ordered to be on alert for possible attacks when off the ship.

If the bomb was intended as retribution for the Iran Airbus tragedy, it was probably not the first such act of revenge.



Mrs. Rogers narrowly escaped injury from the explosion that left her van a blackened wreck

real interests are far from academic. Two days after Revell's warning in Washington, Sharon Rogers, wife of U.S. Navy Captain Will Rogers III, was driving alone through San Diego on her way to her job as a schoolteacher. As her white Toyota van was stopped for a red light, a bomb exploded from underneath. Just before the vehicle burst into flames, Mrs. Rogers jumped out, shaken but unharmed. The van was gutted by the blast. Shards of metal had pierced its roof, barely missing her head. The significance of the bomb, which may have been triggered by remote control, almost certainly lay with Captain Rogers. He is commander of the U.S.S. Vincennes, the guided-missile cruiser that shot down an Iranian airliner over the Persian Gulf last July 3, killing all 290 people aboard. Rogers gave the order to fire missiles at the plane in the mistaken belief that it was an Iranian jet fighter attacking his ship.

The FBI and naval investigators rushed to the Rogers' home in San Diego to check for other explosives. Guards were assigned to Captain and Mrs. Rogers, who went into hiding. They had re-

Various Iranian groups claimed, and investigators now widely assume, that the explosive device that blew up Pan Am's Flight 103 over Lockerbie, Scotland, in December was also a retaliatory strike. That resulted in the death of 270 people, mostly Americans. The prevailing theory among investigators is that the plan to destroy Flight 103 originated among Iranian Revolutionary Guards and was carried out by the Popular Front for the Liberation of Palestine-General Command.

Other evidence that interlocked terrorist groups are growing bold enough to strike in the U.S. came last April. Yu Kikumura, identified by federal prosecutors as a member of the Japanese Red Army, was arrested on the New Jersey Turnpike with pipe bombs designed to injure humans rather than damage buildings. He carried maps pinpointing targets in New York City. Prosecutors claimed his intended attack would have occurred on the second anniversary of the 1986 U.S. bombing of Libya. For unsuspecting Americans, the battle against international terrorism may be coming close to -By Ed Magnuson home.



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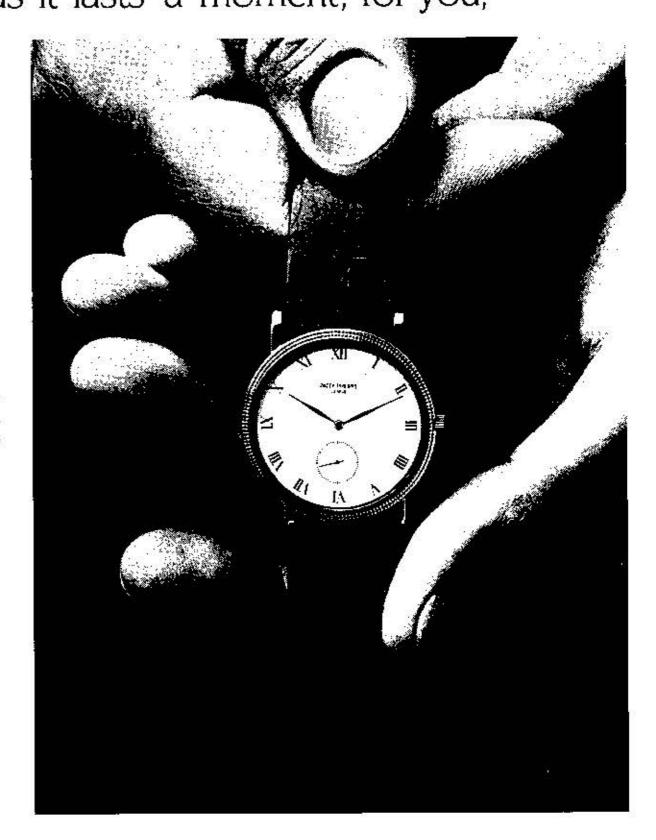
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The Re-Greening of America

A new wave of Irish immigrants is showing its muscle

n scores of U.S. cities this week, Americans of Irish descent will celebrate St. Patrick's Day by donning green hats, marching through the streets shouting "Erin go bragh!" and proudly proclaiming their Irishness to anyone who will listen. Yet as many as 100,000 natives of Ireland, newly arrived in the U.S., will hesitate to join the parades. They live in the fearful shadow world of the illegal alien.

Like their more numerous Hispanic and Asian counterparts, the undocumented "new Irish" switch jobs often, worry about the costs of sickness without Medicaid, and can do little but gnash their teeth candies and bacon. The bleachers are filled for Irish football at Gaelic Park in the Bronx and Dilboy Field near Boston. In New York's Irish neighborhoods, pubs are packed on weekends. "At home in County Offaly, the bars are empty," says Mary Cahill, 26, who has been in America two years. "Most of the young people are in the U.S., Britain or Australia."

The surge of new arrivals began in 1982, propelled by a debt-plagued Irish economy in which unemployment soared to almost 19% last year, sometimes reaching twice that for young people under 25. Even Ireland's Prime Minister Charles



At an Irish import store in New York City, news and food from home sell well

Employing more than luck, and united against perceived unfairness.

when family crises occur in their homeland, because to leave the U.S. might mean never to return. "You often find them trying to put on New York accents while they serve you in a restaurant, just so they can meld into the background and not be found out," says Ray O'Hanlon, the national editor of the New York Citybased Irish Echo newspaper. "This is rather sad."

But unlike the flood of Third World immigrants, the Irish come with advantages: white skin, good education, a knowledge of the language and a talent for politics that would make Boston's legendary Mayor James Michael Curley beam with pride. On the East Coast, they have revitalized neighborhoods deserted by their American cousins. Local shops sell everything from soda bread to Irish

Haughey seemed to encourage the exodus.

Most of the Irish arriving in the U.S. have simply stayed on once their sixmonth tourist or work visas expired. They insist they are in America by stealth because there was no way for them to gain legal entry. The newcomers argue that the U.S. immigration act of 1965 discriminated against the Irish and other Europeans by giving preference to applicants who had family members legally in the U.S. Since Europeans had not been moving in large numbers to America for many years, they were all but locked out. The non-Europeans, mostly Asians and Latin Americans, used the family preference to create a relative-to-relative chain that accounts for more than 90% of the annual inflow of 600,000 immigrants. In 1987, for example, 601,516 people were granted permanent U.S. residence; only 3,060 of them were Irish.

The hard-fought 1986 immigration reform also bypassed the Irish aliens. Aimed mostly at the U.S. southern border, it granted amnesty to foreigners who could show they were in the U.S. before 1982. That was just before the latest Irish influx began, cutting off these new arrivals.

These perceived injustices have unified Irish Americans, both legal and alien, in a way seldom seen in the often contentious community. In New York this week a bishop from Ireland will lead a Mass of Hope in St. Patrick's Cathedral for the new immigrants. An Irish Immigration Reform Movement has created chapters in more than a dozen cities to seek changes in U.S. immigration laws, including the right of the illegals to seek permanent residency. It employs a full-time lobbyist in Washington.

When the Irish get together, many U.S. politicians listen. Boston's Mayor Raymond Flynn last year announced that "the welcome mat is out" for Irish aliens, and has created an office to provide immigrants with legal aid. The administration of New York Mayor Ed Koch declared that the Irish aliens "have nothing to fear in utilizing fully the services" of the city. New York even granted \$30,000 to help finance a counseling hot line for Irish immigrants.

t the federal level, the Irish lobby A won a fight in 1987 to create 10,000 special visas for the 36 countries that the 1965 act treated unfairly. Awarded in a lottery that gave priority to those who applied first, 40% of the visas went to the Irish, who had been closely tracking the process. Last year Congress decided to make an additional 30,000 of these lottery visas available in the next two years, using leftover applications from the first drawing. Since the Irish sent in a disproportionate number of entries, they are expected to do well again. Yet another lottery for 20,000 visas will be held later this year, drawing from new applicants.

Still struggling with the touchy question of who should be admitted to the U.S., Congress will consider a bill this year under which 120,000 of the annual allotted visas would be linked to such considerations as education, profession, work experience and English-language capability. Although the Irish reform group is ardently supporting it, the bill has some opponents, who claim it is élitist. The Statue of Liberty, notes Massachusetts Congressman Barney Frank, does not say, "Send us your upwardly mobile." On the other hand, argues Pat Hurley, cofounder of the Irish Reform Movement. "the attributes that we have—education, skills and ability to communicate well are what America wants." To say nothing of the political ties. —By Ed Magnuson.

Reported by Priscilla Painton/New York

Eastern Goes Bust

Crippled by a walkout, Lorenzo throws the airline into bankruptcy

BY JANICE CASTRO

e did not think that Eastern would be any bed of roses when we bought it three years ago," said a haggard-looking Frank Lorenzo. "But I never believed that we would be here today." Thus, six days into a bitter walkout by some 9,000 mechanics, baggage handlers and other members of the International Association of Machinists and Aerospace Workers. Eastern last week became the largest airline in history to go bust. And even as Lorenzo vowed to bring Eastern out of bankruptcy stronger than ever, he conceded that it might be impossible to avoid selling off more of Eastern's already depleted assets.

Rarely had the stakes in a labor strike been higher. After 17 exhausting months of glacial negotiations with management, rank-and-file union members at Eastern

decided to strike despite the risk that they might force the 60-year-old carrier to go belly up—and lose Eastern's 31,200 jobs in the process. For Lorenzo, the intense chairman of Eastern's parent firm, Texas Air, the prospects were no better: the nation's seventh largest airline was clearly in for a bone-jarring ride, huge financial losses and a very uncertain landing.

From the start, Eastern's pilots unflinchingly backed striking mechanics and flight crews by walking off their jobs, and their action grounded all but a handful of the air-

line's 250 planes. With a dwindling war chest of \$200 million, hemorrhaging at a rate of \$4 million a day, Eastern was forced to file for protection under the Chapter 11 provisions of the Federal Bankruptcy Code. Lorenzo used the same tactic 5½ years ago to break the unions and reorganize Continental, but this time, under revised bankruptcy laws, he will find the process more arduous.

Charles Bryan, the tough-talking leader of the airline's machinists, who makes

Fed up: machinists' union members vent their frustrations at a rally at Miami airport

no attempt to hide his personal animus toward Lorenzo, responded with characteristic defiance. Said he: "We take no responsibility for the strike. This is a Frank Lorenzo strike." Eastern's differences with its unions had long since deteriorated into a bitter and highly personal feud between the two men. While Eastern insisted that the airline could not survive without substantial wage concessions from the machinists, Bryan maintained that Lorenzo was out to destroy the carrier and sell it off for his own profit. Lorenzo's battle with the machinists, said Bryan, was "the purest case of evil vs. good."

That set the tone for the showdown. U.S. Transportation Secretary Samuel Skinner, announcing that President Bush refused to intervene in the Eastern strike, could not resist a verbal shiv of his own. "Mr. Lorenzo." he said, "has obviously not got the trust and admiration of his employees." As unionists burned an effigy

of the Texas Air chairman, their leaders laid ambitious plans to expand the strike through a series of secondary boycotts that would tie up commuter traffic across the country—a nightmare that was averted when judges in several cities slapped temporary restraining orders on strikes of intercity rail and commuter lines.

Even so, Eastern's determination to keep planes in the air during the strike quickly unraveled as pilots refused to cross picket lines. Since he took over Eastern in 1986, the pilots charged, Lorenzo has systematically stripped the airline of its most valuable assets, leaving it too small and weak to compete.

In the past three years Eastern has sold eleven of its passenger-boarding gates and a choice Miami-to-London route, and has transferred 20 airliners to Continental, another unit of Texas Air. Two years ago, Eastern sold its computerized reservation system to Texas Air for \$100 million—a price most industry experts said was too low. Last October, Eastern agreed to sell its profitable Northeast shuttle to Donald Trump for \$365 million. Two days after the bankruptcy notice, Eastern Express, a Florida commuter air-







line owned by a Texas Air subsidiary, changed its name to Continental Express. Said J.B. Stokes, a spokesman for the Air Line Pilots Association: "It was either make the stand now, while there's still something left to fight for, or do it six months later, when there's nothing left."

Union workers were not the only ones swept up in the battle. As the strike strangled airline operations, 9,500 nonunion secretaries, ticket agents and other workers were laid off. Aside from making a

handful of flights between Miami and Latin American cities, the airline concentrated its

efforts on keeping the Northeast shuttle flying so that the cash-rich deal with Trump would not fall through. To attract passengers. Eastern offered a temporary fare of \$12 for weekend shuttle flights from New York to Washington or Boston, a fraction of its usual rate of \$69. The tactic worked: the first flights sold well.

But for most travelers holding Eastern tickets, the week was an exercise in frustration-and worse. Many passengers arriving at understaffed counters were unable to get on any flight. Hundreds of vacationers missed connections with Florida cruises because flights south were canceled. Hundreds of thousands of airline customers were left holding some \$250 million worth of prepaid Eastern tickets. In order to get refunds, those who paid in cash will have to queue up behind Eastern's secured creditors and wait as long as a year.

To improve its precarious cash position, Eastern on the eve of bankruptcy agreed to sell eight boarding gates at the Philadelphia airport to USAir for \$70 million. It picked up \$15 million more by agreeing to sell its Philadelphia-Toronto and Philadelphia-Montreal routes to USAir. In addition, Eastern leased landing slots on its New York-Miami routes to Continental. Accusations flew that Lorenzo was dismantling the airline even during the strike. Responded Lorenzo angrily: "Had we sold assets quicker, Eastern wouldn't be in bankruptcy today." Along with the shuttle sale to Trump, the deals with USAir will have to be approved by the bankruptcy judge.

Cornered: the Texas Air chief explaining his decision in Manhattan last week

Meantime, Eastern's competitors had a field day poaching on the crippled airline's territory. TWA, Delta and Pan Am added flights on Eastern routes to capture its customers. Even Amtrak and Greyhound expanded their service to meet the new demand. TWA Chairman Carl Icahn confirmed that Eastern's unions had asked him to launch a bid for the airline. Icahn briefly considered such a bid last fall. He found the idea interesting, he said, but did not want to interfere in Eastern's collective-bargaining process. Lorenzo was cool

> to the suggestion. "Our major goal at the moment is coming to an agreement with our unions," he said. "I can't imagine how having someone like Icahn get involved will do anything but interfere with the process."

By choosing bankruptcy, Lorenzo has won some breathing room, but he has also given up considerable power. Under federal law, Eastern management will have 120 days to submit its reorganization plan to the bankruptcy court. In the

meantime, the airline can resume normal operations if it reaches an agreement with its unions. But the rules have changed since Lorenzo's previous foray into Chapter 11 with Continental. Management can no longer toss out union contracts under Chapter 11 without the court's approval.

Eastern's unions welcome the prospect of dealing with a judge instead of Lorenzo. But they too will lose clout under Chapter 11. For one thing, the bankruptcy court has the power to set terms for a contract settlement. But the unions will also be able to file a reorganization plan for the airline. Union leaders gave every indication that the strike will continue. At week's end its focus turned to picketing Continental facilities at airports in Miami, Houston, Denver and Newark.

The dramatic events took their toll on Lorenzo. "I'm not going to kid you by saying that some of those efforts haven't hurt my family and me," he said last week. "They have." Lorenzo maintains that he has done everything in his power to prevent Eastern from folding. He recalls the options that former Eastern Chairman Frank Borman described for the airline in 1986: "Fix it, sell it, or tank it." Unable to fix it, Borman sold it. As the bankruptcy court now begins to address the formidable task of putting Eastern back together again, Lorenzo was facing the possibility last week that tanking Eastern may yet turn out to be the only choice left. — Reported by Gisela Bolte/Washington and Thomas McCarroll/New York



Enter the Brady Plan

Washington unveils a new program to ease Third World debt

s a longtime and close ad-A s a longtime and close adviser to President George Bush, Secretary of State James Baker is one of the most powerful men in Washington. But his tenure as Ronald Reagan's Treasury Secretary has left a sorry legacy: the failure of the so-called Baker plan, the 1985 policy designed to ease the debt burden of Third World Secretary Brady nations. The 15 largest bor-



rowers, most of them in Latin America, have seen their debt climb to more than \$500 billion, from \$350 billion in 1981. The debt load has left local economies a shambles and fragile democracies threatened. After 300 people died in Venezuela two weeks ago during riots over austerity measures imposed to pay off foreign debt, the Bush Administration decided that the time had come to act.

In unveiling a sweeping new approach to the crisis last week, Treasury Secretary Nicholas Brady all but repudiated Baker's program, which promised new loans for debtor countries once they instituted economic reforms. Instead, he called for measures that would help reduce Third World debt. "Our objective," said Brady, "is to rekindle the hope of the people and leaders of debtor nations that their sacrifices will lead to greater prosperity in the present and the prospect of a future unclouded by the burden of debt."

The Administration has tried to mini-

mize the change, but the break with past policy is dramatic. The Baker plan adamantly rejected the notion that debt reduction should be achieved by commercial banks writing off a significant portion of their loans. But the Administration is now encouraging U.S. commercial banks to reduce some of their Third World loans by allowing debtor countries to

make smaller payments on their principal and interest obligations. Brady left many of the plan's details vague, and the initial response from bankers, Congress and Latin American finance ministers was guarded. The Mexican government called the plan a "first positive step" but cautioned that many details still need to be worked out. New Jersey Senator Bill Bradley, an outspoken critic of the old debt program, called it a "significant change in direction" and declared that the "Baker plan is dead."

Not everyone was so enthusiastic. Venezuelan President Carlos Andrés Pérez called the new proposals "encouraging" but only "very timid steps." Paul Volcker, former chairman of the Federal Reserve Board, warned against looking for a "magic elixir" to solve the crisis. In a speech before a conference on Third World debt in Washington, Volcker explained, "If not well managed, a process of debt reduction clearly could be hazardous to the health of debtors and creditors alike."

No one, however, was calling for a revival of the Baker plan. Baker hoped to spark economic expansion and allow debtors to grow their way out of their problems. What happened was just the opposite. Most banks simply refused to issue new loans, fearing they would be throwing good money after bad. As a result, debtor countries found themselves using more and more of their scarce currency reserves to pay their debts. Last year Latin American nations paid \$26 billion in interest to their creditors but received only \$6 billion worth of new bank loans. The results were stagnant growth and a rate of inflation that has soared to 400% in Argentina and 1,000% in Brazil.

The Brady proposal hopes to reverse that tide by giving lenders an incentive to ease the pressure on debt-ridden countries. A banker, for example, might be willing to accept lower interest payment on an existing loan—6% a year, say, as opposed to 10%— if assured that all interest payments would be made on time. In recent years, many strapped Latin debtors have repeatedly made late interest payments. This has an immediate and painful effect on the creditor bank, since it lowers its quarterly earnings. Under the new plan, the International Monetary Fund and the World Bank would insure that interest payments are made on time.

n the past, some economists have argued that new money must be provided to make any meaningful dent in the debt load. Secretary Brady has not proposed earmarking any new U.S. funds to help solve the debt crisis. But Japanese Finance Minister Tatsuo Murayama last week pledged financial support for the Administration plan, though no numbers have yet been released.

The U.S. is under increasing pressure to find a solution to the debt crisis. Last year Mexican President Carlos Salinas de Gortari won election by the narrowest margin in his party's 59-year history over left-of-center candidate Cuauhtémoc Cárdenas. In Brazil leftwing parties have mounted a serious challenge to President Jose Sarnéy. And a nationalist party in Argentina could win the presidential elections set for mid-May.

Politics will be very much on the minds of central bankers and finance ministers when they convene in April in Washington at the semiannual meeting of the IMF and World Bank. At a series of closed-door meetings, the world's leading moneymen will tackle the details of the U.S. proposal in earnest. They will probably have little trouble agreeing that debt relief is a worthy goal. After that, nothing will --- By Barbara Rudolph. come easy.

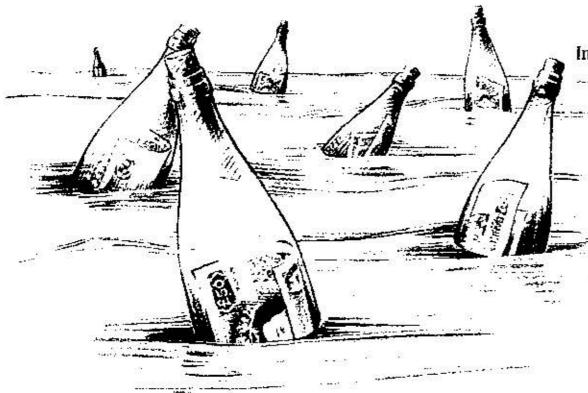
Reported by Richard Hornik/Washington



Soldiers patrol streets of Caracas after 300 Venezuelans died in riots over austerity measures

Trying to rekindle the hopes of debtor nations that sacrifices will lead to greater prosperity.

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Copies of the last audited accounts are available on request, Halifax Building Society's registered office is in Halifax, UK.

Time, Life, Sports Illustrated, Fortune, Money,

Hippocrates, President, Fortune France, Fortune Italy,

McCall's, Working Woman, Working Mother, Baby.

Whittle Communications

HBO, Cinemax, **HBO Video**

Time-Life Books; Book-of-the-

Month Club; Little, Brown; Oxmoor;

Time-Life Home Video

Living, Progressive Farmer, Southern Accents, Cooking Light,

Travel South. Part owner: Asiaweek, Yazhou Zhoukan, Parenting,

1988 revenues. in millions

\$2,096 FILMED ENTERTAINMENT

People, Sports Illustrated for Kids, Student Life, Southern MAGAZINES \$1,752

CABLE PROGRAMMING \$1,052

Warner Bros., Warner Bros. TV, Lorimar (acquired January 1989), Warner Home Video, Licensing Co. of America

\$2,040 MUSIC

Warner Bros. Records, Atlantic Records, Corp., Warner Special Products,

Electra/Asylum/Nonesuch Records, WEA Corp., WEA International, WEA Manufacturing, Ivy Hill

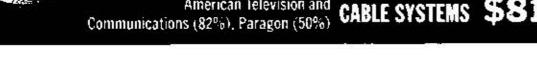
Warner/Chappell Music

\$456 CABLE SYSTEMS

Warner Cable Communications. BHC Inc. (42.5%) BOOKS \$891

Warner Books, DC Comics, Mad Magazine, \$139 **PUBLISHING** Warner Publishing Services

American Television and CABLE SYSTEMS \$812



Glory! Glory!

Scott, Foresman; Time-Life Music;

A Deal Heard Round the World

Faced with growing global competition in the information and entertainment industries, Time and Warner join forces to form a communications giant

ven in the era of the megamerger, this one was remarkable. No wonder the press and public were fascinated by the announcement that Time Inc. and Warner Communications would join to form the world's largest information and entertainment company. From Tokyo to Paris to Hollywood, media moguls sized up the new firm, trying to gauge its potential clout in the increasingly fierce international battle for the attention of readers, filmgoers and television viewers. The New York Times proclaimed that the union would "insure Time Warner a place in the 1990s as one of a handful of global media giants." Declared the Chicago Tribune: "The deal creates a corporate dynamo." In Munich the daily newspaper Süddeutsche Zeitung disagreed, predicting that the union would be a "Tower of Babel." And on Wall Street, where there had not been much excitement since the contest for RJR Nabisco, investors and speculators were agog over the proposed \$9.5 billion exchange of Time shares for Warner'sthe largest stock swap ever.

The merger, which will result in Time

Warner Inc., had a lot going for it. Who, after all, would have the money or the fortitude to stand in the way of a solid agreement between two of America's biggest companies? Yet Time and Warner have long been considered takeover targets, and speculation arose that a raider might go after one of them soon, before a merger could create a nearly invulnerable behemoth. Everyone from Rupert Murdoch to Warren Buffet, the shrewd Omaha-based investor, was mentioned as a possible buyer. But no suitor had come forward by week's end. Time's shares gained 6% for the week, to close at 11534, and Warner's rose 2\%, to 48\%.

Time Chairman Richard Munro and Warner Chairman Steven Ross, who agreed to share power as co-chief executives of the new company, were confident that their deal would withstand any challenges. Said Munro: "We are not for sale." Time President N.J. Nicholas will take Munro's slot as co-chief executive of Time Warner if Munro retires in 18 months as planned. To strengthen their position, the two companies have also agreed to exchange some 10% of each other's stock in advance of the merger.

One big question mark is the stance of Herbert Siegel, the president of Chris-Craft Industries, which is Warner's largest shareholder, controlling 19% of the company's stock. He and Ross do not get along, largely because Siegel disapproves of the way Warner spends money on generous executive compensation (for Ross alone in 1987; \$4.5 million in salary and bonus) and corporate amenities like the six-bedroom Acapulco villa for entertaining movie stars. Siegel also apparently believes that Warner is being undervalued in the merger agreement. When the proposed deal came up before Warner's board for a vote, Siegel abstained, while all the other members approved. Time and Warner officials, who are trying to convince Siegel of the merger's merits, admit that he could take legal steps to delay the transaction, but they insist he cannot stop it.

If approved by Time and Warner shareholders, the merger would create a company that will have annual revenues of more than \$10 billion and a market value of \$18 billion. It would combine Time's







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Once, sports belonged to an elite circle of athletes and heroes. They jumped further. And they ran faster than others.

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Each watch is stylish and sophisticated. Each is a striking sports fashion statement.

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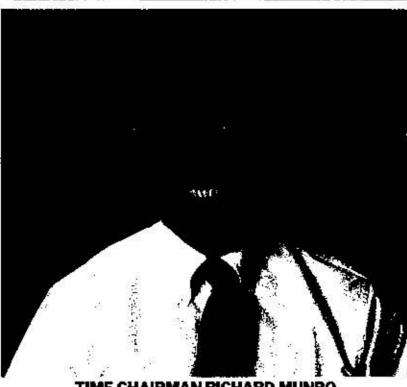
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magazines and its hardcover-book publishing, its cable programming and its cable-TV operations with Warner's movie, TV and video production, music labels, cable systems, paperbacks and comic books. The new company would include not only Time's stable of talented journalists, spread over two dozen magazines, but also Warner's Mad magazine, Superman comics and such recording artists as Madonna and U2. The businesses are thus related, but largely complementary. "This is the first merger in a long time that makes a lot of sense," said Edward Atorino, a media analyst at the Smith Barney investment firm.

Time and Warner were moved to merge by the growing global consolidation in the communications business and by the many foreign acquisitions of American companies. In recent years, West Germany's Bertelsmann bought RCA Records and the Doubleday and Bantam Books publishing houses; Britain's Robert Maxwell took over Macmillan publishers; Japan's Sony acquired CBS Records; and Australian-born Murdoch (now a U.S. citizen) accumulated newspapers, magazines, a movie studio and a TV network. Said Time's Munro: "We see Maxwell, Murdoch, Bertelsmann and Sony coming into our market and raising hell, and we see this [merger] as an opportunity for an American company to get competitive." In fact, Time Warner would vault ahead of the competition. Bertelsmann, whose annual revenues are nearly \$7 billion. would fall to the No. 2 spot among the world's media companies.

As with any large merger, the Time-Warner deal will be reviewed by the Government to see if it poses any antitrust or other regulatory problems. The only major overlap between the two companies is that they are both big operators of local cable-TV systems. After the merger. Time Warner will serve 5.6 million customers, or 12% of U.S. households with cable. The new operation will still be smaller than the largest cable company, Tele-Communications, which serves 24% of the industry's customers. Experts say that unless President Bush takes a tougher antitrust stance than the Reagan Administration did, the Government is not likely to block a

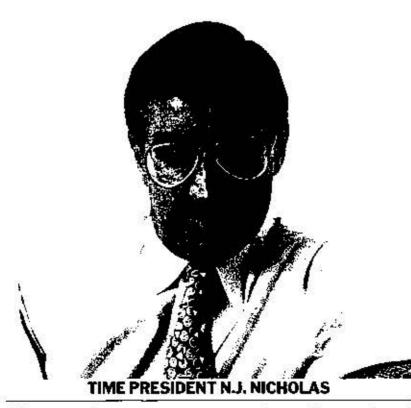
Time-Warner merger. Nonetheless, Ohio Democrat Howard Metzenbaum, chairman of the Senate antitrust subcommittee and a vocal critic of big mergers, immediately objected to the proposed combination. He acknowledged that the deal did not appear to violate the Government's guidelines for "horizontal concentration" within an industry, but asserted that



TIME CHAIRMAN RICHARD MUNRO



WARNER CHAIRMAN STEVEN ROSS



The executives spent two years getting well acquainted.

those "guidelines are clearly inadequate for a complete evaluation of this merger." The Senator expressed concern about companies being involved in both the production and distribution of cable-TV programming. Metzenbaum noted that in most communities there is only one cable operator. He fears that such operators might rely too heavily on programs produced by a parent company. and thus offer fewer choices to their ca-

ble subscribers. Time and Warner executives do not think this is a real problem. "How does a cable operator make money?" asked Ross. "By offering the widest selection of programs to customers."

The merger raises the possibility of conflicts of interest among the various parts of the Time-Warner empire. Could. for example, a Time publication objectively review a Warner Bros. movie? Certainly, said TIME Editor in Chief Jason McManus, who pointed out that for years TIME and PEOPLE have been reviewing, both favorably and unfavorably, shows produced by the company's Home Box Office cable service. In forming their union, Time and Warner officials agreed that a commitment to journalistic and artistic integrity was absolutely essential. When asked what would happen when one of the Time magazines panned a Warner film. Ross replied. "They wouldn't hear from me at all. I'd just tell my people to make better movies."

To allow time for the two enter-: prises to get thoroughly comfortable with each other, Munro and Ross are planning to go slow in integrating the various divisions. Only the cable and books operations will be immediately combined. All others will continue to operate as separate units, with Warner's old divisions reporting to Ross and Time's to Munro and Nicholas. Five years down the road, according to the merger agreement, the management will be unified, with Nicholas as the chief executive. "We're not going to crash these two companies together," said Nicholas. Both Time and Warner believe their greatest opportunities for cooperation and growth lie overseas. Ross, for example. hopes to use Warner's worldwide film-and-TV-distribution network to market HBO programming.

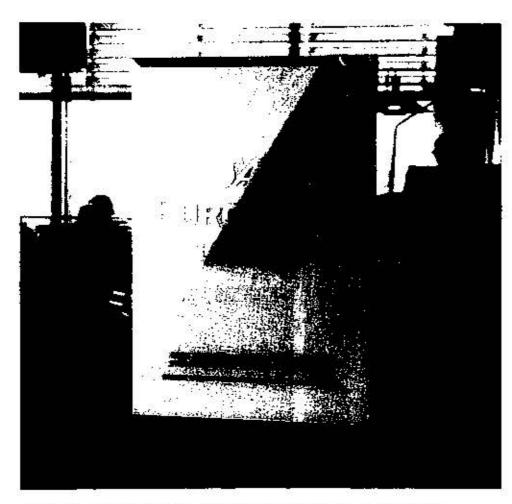
Some industry observers have questioned whether Ross's Hollywood ways can easily coexist with the more conservative management style at Time. "Can they work together, or will egos get in the way of the dreams of managers?" asked a Wall Street media expert. Munro and Nicholas decided to go ahead only after many

lengthy discussions with Ross dating back to early 1987, and they feel they know their man. "Over the past two years," said Munro, "we have probably spent more time with Steve Ross than with our wives. We feel very comfortable with him." As in all corporate marriages, the trick will be to keep the romance going after the courtship and honeymoon -By Charles P. Alexander.

Reported by Frederick Ungeheuer/New York

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One of the most popular aspects of SAS EuroClass has nothing to do with the actual flights.

If you've paid a visit to any of our 23 Euro-Class Lounges around the world, you'll know what we mean.

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Fashion Without Frontiers

Two top Italian designers defect to France

ass the smelling salts: Valentino has deserted Italy for France. And that's not all. Romeo Gigli will take his pseudocerebral fashions out of Milan and plunk them down in the middle of the Paris runways. Desertion! Infamy! Tribal politics! Frets Beppe Modenese, program organizer of the just concluded Milan fashion week: "Both Valentino and Gigli have done big damage to the Italian fashion image."

So have their clothes, but then that is a matter of taste. By choosing to absent themselves from their home turf, Valentino and Gigli have sent the kind of political signal that is beyond debate: Paris is fashion central, and Milan is just a big backyard. This is not news to the French, of course, who responded to the story of the traveling Italians with the kind of equanimity that barely skirts smugness. "Paris is still No. 1 in fashion," says Jacques Mouclier, president of the Chambre Syndicale, which sponsors the twiceyearly ready-to-wear fashion shows held in the jammed courtyard of the Louvre. "The Italians have come because they've realized they can't do without us. The Milan ready-to-wear draws far fewer journalists than the shows in Paris. Need I say more?"

Perhaps not. Gigli and Valentino have already said plenty. "I don't believe

in frontiers," reflects Gigli. Explains Carla Sozzani, a business associate of the designer's: "Romeo's all for 1992 and a united Europe." Valentino has announced some similar geopolitical aims. "I am going to Paris as an Italian designer to speak for Italy," he says. "I will never betray my country, but I need the challenge to do better." Elaborates Giancarlo Giammetti, Valentino's partner: "Rome is becoming a very provincial market, and it's simply not stimulating the creator."

The Creator may have finished his big job in six days, but Giammetti's creator works full time to fuel his fashion empire (estimated wholesale haul for 1989: \$600 million), and has for some time been trying to seem like an internationalist. Valentino's ready-to-wear has been on view in Paris for the past 14 years without attracting a commotion. Gigli is looking for an imprimatur, separating himself

from the excellent elegances of Milan in favor of the more experimental company in Paris. The intrepid Japanese designers show their stuff in Paris; so do the haut trendies like Jean-Paul Gaultier and Claude Montana. The company is faster there than in Milan, where Giorgio Ar-







Valentino preens with his model, top; Gigli's wrapped-up street wear for Paris, left; stay-at-home Ferre's elegant creation

mani, Italy's premier talent, casts a very long shadow indeed. "Presumptuous," is the way Armani characterizes Gigli's move, adding, "He may want to be international, but his move is premature."

Milan has been bucking Paris and all its traditions for over a decade, but the City of Light still holds a clear lead. Milan staked its claim in a time of flux, when the fashion establishment, still shell-shocked by the '60s, was not quite so restrictive. Italy came on with a rush of fresh talent: dazzling designers (like the Missonis), some fine hands (like Gianfranco Ferre) and some naughty boys (like Gianni Versace). But, in Armani, it produced just a single world beater. Paris, on the other hand, can still offer a wider spectrum: sumptuous Saint Laurent, engaging Lagerfeld, generative Miyake, fast-flash Gaultier, ebullient Patrick Kelly. As ever, it is center stage, the arena on which designers want most to play, especially if they are coming on (like Gigli) or consolidating (like Valentino).

There was also some suggestion around the Milan shows last week that Gigli had left in a bit of a huff, having lost a wrangle over a choice scheduling spot to Ferre, whose revenues (\$390 million in 1988) currently carry a good deal more clout than Gigli's (under \$10 million). "One day I just woke up and thought I'd like to show in Paris," shrugs Gigli, perhaps forgetting that Paris, for other Italian designers (like Simonetta), turned into a nightmare that left them disenfranchised, with no singular creative identity. "I shouldn't yet take all this for

more than a one-season wonder," said Suzy Menkes, the savvy fashion editor of the *In*ternational Herald Tribune. "All designers are prima donnas to some extent, and I expect Gigli just wanted to teach the Milanese organizers a lesson."

For his part, Valentino was playing the diplomat. "It's a great joy for me to show in Paris," he said. "I'll certainly still show in Rome, but couture is my métier, and I learned it in Paris. But I always keep my Italian accent when speaking French, and so do my clothes." By the time some State Department of Fashion has worked out all the coded signals and careful contradictions in that dispatch, the dust will have settled. There is always a lot of it around during fashion season anyway, especially when the clothes aren't good enough to clear the air. -By Jay Cocks. Reported by Regan Charles/Paris

When Less May Be More

A heart study finds drugs as effective as invasive methods

hen people have a heart attack today, they are likely to be given powerful drugs to dissolve the clots that block the flow of blood to the cardiac muscle. But the drugs are generally used only to buy time until invasive procedures can be performed. These include angiography, the injection of a material into the coronary arteries to identify by X ray the 1 patient in 6 apt to have another attack; and balloon an-



Demonstrating a TPA treatment

Less trauma for heart-attack patients.

gioplasty, the threading into a blocked artery of a catheter with a tiny balloon on the end that presses plaque against the artery wall and widens the channel.

Now a new and controversial study has emerged to challenge this conventional treatment. Published last week in the New England Journal of Medicine, it concludes that immediate angiography and angioplasty, both costly and somewhat risky techniques, are unnecessary in most heart-attack cases. The 50-hospital study, sponsored by the National Institutes of Health and known as TIMI II (for thrombolysis in myocardial infarction phase II trial), involved 3,262 patients who had suffered apparent heart attacks. Within four hours of their attacks, all patients received a powerful clot dissolver, known as TPA (tissue plasminogen activator), along with heparin and aspirin to inhibit blood coagulation. Of the 1,636 patients in the

invasive-strategy group, 928 underwent angiography and angioplasty within 18 to 48 hours after their attacks.

The results were surprising: after six weeks, the number of deaths and repeat heart attacks were similar for each group, a strong indication that there was no advantage in having angioplasty. The study's conclusions: angiography and angioplasty can be safely put off until patients show recurrent signs of a deficient blood supply to the heart muscle.

Not all cardiologists agreed with TIMI II's conclusions. Dr. Geoffrey Hartzler of the Mid America Heart Institute in Kansas City took issue because the study excluded patients age 76 and over, as well as anyone with a history of bypass surgery, heart-valve replacement, cerebrovascular disease, or other serious illness. "These were low-risk people, and it's a bad rap for angioplasty," he complained. "In fact, direct angioplasty alone, with no clot-dissolving drugs, is probably the single most effective treatment for acute heart attack."

Nonetheless, the trial has enormous implications for the routine care of heart-attack patients. Community hospitals with well-equipped coronary-care units, for example, could offer the relatively simple drug treatment and send patients in real need of angioplasty or bypass to specialized centers. If cardiologists adopt TIMI II's conservative strategy, the estimated financial savings could total \$200 million a year.

—By John Langone

Snuffed Sniffles

Is a cold remedy in sight?

been an elusive goal for generations. The reason: there are more than 100 different types of rhinoviruses, the culprits responsible for about half of all colds. Now scientists may have the key to warding off the sniffles. Reporting in the journal Cell last week, two separate research teams announced the discovery of a cell molecule to which rhinoviruses attach themselves. When the cold viruses bind to the molecule, known as the ICAM-1 receptor, they infect the cell.

The discovery means that synthetic copies of the molecule might one day be made into a decoy medicine. Sprayed into the nose, the drug could confuse invading rhinoviruses, luring them away from the real cell receptors in the body. Once bound to the synthetic, the viruses could be neutralized and thus prevented from causing colds. But that strategy, which might prevent but probably would not cure an active cold, has thus far worked only in the test tube. Relief is still years away.

Milestones

MARRIED. William Hurt, 38, Oscar-winning actor (for 1985's Kiss of the Spider Woman) and star of the Oscar-nominated film The Accidental Tourist; and Heidi Henderson, daughter of bandleader Skitch Henderson; he for the second time; in Sneden's Landing, N.Y.

MARRIED. Kevin Kline, 41, swashbuckling stage actor (The Pirates of Penzance) and screen star (The January Man); and Phoebe Cates, 25, model and actress (Bright Lights, Big City); both for the first time.

SEPARATED. Joseph P. Kennedy II, 36, twoterm Massachusetts Congressman and eldest son of the late Senator Robert F. Kennedy; and city planner Shella Rauch Kennedy, 39; after ten years of marriage. Kennedy also withdrew himself from consideration to succeed Massachusetts Governor Michael Dukakis next year.

HOSPITALIZED. Carroll O'Connor, 64, rotund actor best known as the amiable bigot Archie Bunker in the 1970s TV series All in the Family and current star of NBC's In the Heat of the Night; for coronary-artery bypass surgery at Emory University Hospital in Atlanta.

who in 1986 received the transplanted heart of her lovelorn classmate Felipe Garza after he predicted his own death and willed his heart to her; when the donated heart unexpectedly stopped beating; in Patterson, Calif. Before the transplant, Ashlock had suffered from an enlarged heart. Garza made his bequest before dying of a brain hemorrhage.

DIED. Robert Mapplethorpe, 42, provocative photographer who entranced the art world with his masterfully sculptured nudes; of AIDS; in Boston. Notorious for his sado-masochistic imagery, Mapplethorpe also crafted iconographic portraits of celebrities and precise images of orchids, tulips and calla lilies.

DIED. Kermit Beahan, 70, the bombardier who released the atom bomb over Nagasaki, Japan, on Aug. 9, 1945; of a heart attack; in Nassau Bay, Texas.

DIED. Roger-Patrice Pelat, 70, businessman and friend of President François Mitterrand, and a central figure in France's most sensitive insider-trading scandal; of a heart attack; in Paris. Last month Pelat was charged with insider profiting in the 1988 takeover of Triangle Industries by France's Péchiney S.A. Mitterrand defended his friendship with Pelat after the stock scandal broke but pledged that "privileged connections" would not obstruct justice.

COVER STORIES

The Gene Hunt

Scientists launch a \$3 billion project to map the chromosomes and decipher the complete instructions for making a human being

BY LEON JAROFF

Know then thyself . . . the glory, jest. and riddle of the world.

-Alexander Pope

In an obscure corner of the National Institutes of Health (NIH), molecular biologist Norton Zinder strode to a 30ft.-long oval conference table, sat down and rapped his gavel

for order. A hush settled over the Human Genome Advisory Committee, an unlikely assemblage of computer experts, biologists, ethicists, industry scientists and engineers. "Today we begin," chairman Zinder declared. "We are initiating an unending study of human biology. Whatever it's going to be, it will be an adventure, a priceless endeavor. And when it's done, someone else will sit down and say. 'It's time to begin.' "

With these words, spoken in January, Zinder formally launched a monumental effort that could rival in scope both the Manhattan Project, which created the Abomb, and the Apollo moon-landing program-and may exceed them in importance. The goal: to map the human genome and spell out for the world the entire message hidden in its chemical code.

Genome? The word evokes a blank stare from most Americans, whose taxes will largely support the project's estimated \$3 billion cost. Explains biochemist Robert Sinsheimer of the University of California at Santa Barbara: "The human genome is the complete set of instructions for making a human being." Those instructions are tucked into the nucleus of each of the human body's 100 trillion cells* and written in the language of deoxyribonucleic acid, the fabled DNA molecule.

In the 35 years since James Watson and Francis Crick first discerned the complex structure of DNA, scientists have managed to decipher only a tiny fraction of the human genome. But they have high hopes that with new, automated techniques

and a huge coordinated effort, the genome project can reach its goal in 15 years.

The achievement of that goal would launch a new era in medicine. James Wyngaarden, director of the NIH, which will oversee the project, predicts that it will make "major contributions to understanding growth, development and human health, and open new avenues for therapy." Full translation of the genetic message would enable medical researchers to identify the causes of thousands of still mysterious inherited disorders, both physical and behavioral.

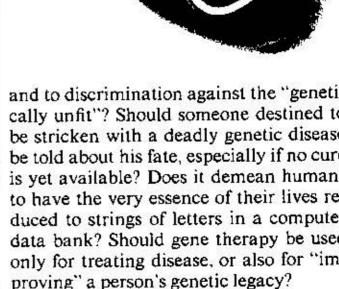
With this insight, scientists could more accurately predict an individual's vulnerability to such obviously genetic diseases as cystic fibrosis and could eventually develop new drugs to treat or even prevent them. The same would be true for more common disorders like heart disease and cancer. which at the very least have large genetic components. Better knowledge of the genome could speed development of gene therapy—the actual alteration of instructions in the human genome to eliminate genetic defects.

he NIH and the Food and Drug Administration have already taken a dramatic step toward gene therapy. In January they gave approval to Dr. W. French Anderson and Dr. Steven Rosenberg, both at the NIH, to transplant a bacterial gene into cancer patients. While this gene is intended only to make it easier for doctors to monitor an experimental cancer treatment and will not benefit the patients, its successful implantation should help pave the way for actual gene therapy.

The very thought of being able to read the entire genetic message, and perhaps alter it, is alarming to those who fear the knowledge could create many moral and ethical problems. Does genetic testing constitute an invasion of privacy, for example, and could it lead to more abortions

and to discrimination against the "genetically unfit"? Should someone destined to be stricken with a deadly genetic disease be told about his fate, especially if no cure is yet available? Does it demean humans to have the very essence of their lives reduced to strings of letters in a computer data bank? Should gene therapy be used only for treating disease, or also for "improving" a person's genetic legacy?

Although scientists share many of these concerns, the concept of deciphering the human genome sends most of



*Except red blood cells, which have no nucleus.

them into paroxysms of rapture. "It's the Holy Grail of biology," says Harvard biologist and Nobel laureate Walter Gilbert. "This information will usher in the Golden Age of molecular medicine," says Mark Pearson, Du Pont's director of molecular biology. Predicts George Cahill, a vice president at the Howard Hughes Medical Institute: "It's going to tell us everything. Evolution, disease, everything will be based on what's in that magnificent tape called DNA."

That kind of enthusiasm is infectious. In an era of budgetary restraint, Washington has been unblinkingly generous toward the genome project, especially since last April, when an array of scientists testified on the subject at a congressional committee hearing. There, Nobel laureate Watson of DNA fame, since picked by the NIH to head the effort, mesmerized listeners with his plea for support: "I see an

extraordinary potential for human betterment ahead of us. We can have at our disposal the ultimate tool for understanding ourselves at the molecular level . . . The time to act is now."

Congress rose to the challenge. It promptly allocated more than \$31 million for genome research to the NIH and to the Department of Energy and the National Library of Medicine, which are also involved in the quest. The combined appropriations rose to \$53 million for fiscal 1989.

Even more will be needed when the effort is in full swing, involving hundreds of scientists, dozens of Government, university and private laboratories, and several computer and data centers. With contributions from other Government agencies and private organizations like the Hughes institute, the total annual cost of the project will probably rise to \$200

million, which over 15 years will account for the \$3 billion price tag.

The staggering expense and sheer size of the genome project were what bothered scientists most when the idea was first broached in 1985 by Sinsheimer, then chancellor of the University of California at Santa Cruz. "I thought Bob Sinsheimer was crazy," recalls Leroy Hood, a biologist at the California Institute of Technology. "It seemed to me to be a very big science project with marginal value to the science community."

Nobel laureate David Baltimore, director of M.I.T.'s Whitehead Institute, was one of the many who feared that such a megaproject would have much the same impact on biology that the shuttle had on the U.S. space program: soaking up so much money and talent that smaller but vital projects would dry up. Others stressed that the technology to do the job in a reasonable time was not available. But by 1986 some opponents realized they were fighting a losing battle. "The idea is gaining momentum. I shiver at the thought," said Baltimore then. Now, however, he approves of the way the project has evolved and has thrown his weight behind it.

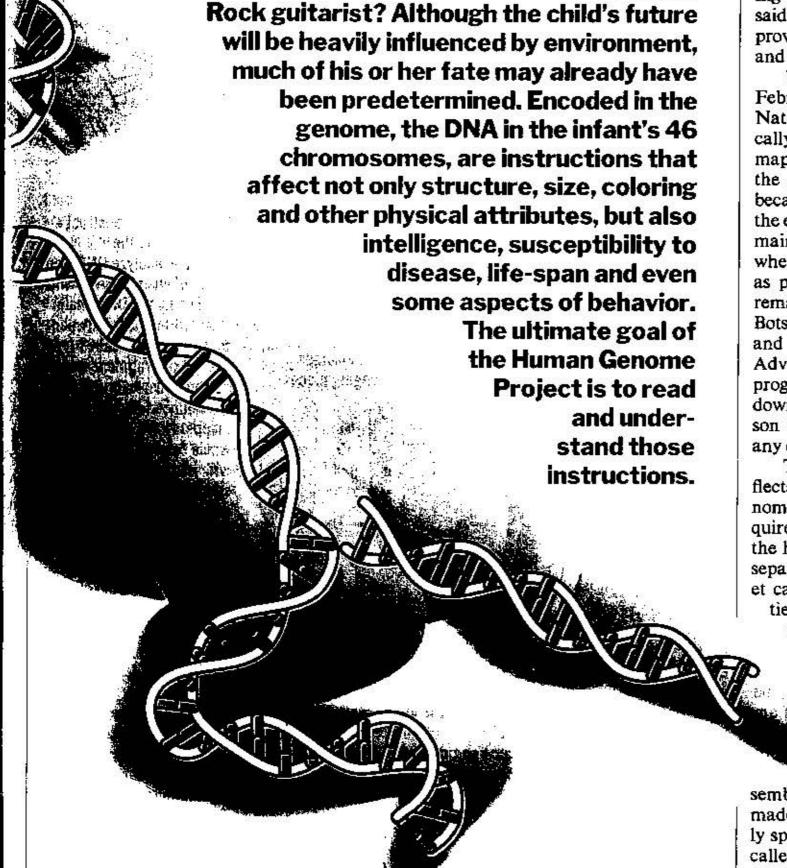
What really turned the tide was a February 1988 report by the prestigious National Research Council enthusiastically endorsing a project that would first map and interpret important regions of the genome, then—as better technology became available-proceed to reading the entire genetic message. Most of the remaining critics were silenced last fall when the NIH chose the respected Watson as project director. Still, some scientists remain wary of the project. Says David Botstein, a vice president at Genentech and a member of the Human Genome Advisory Committee: "We need to test its progress, regulate its growth and slap it down if it becomes a monster. Jim Watson understands the dangers as well as any of us."

The concern, as well as the cost, reflects the complexity of the human genome and the magnitude of the effort required to understand it. DNA is found in the human-cell nucleus in the form of 46 separate threads, each coiled into a packet called a chromosome. Unraveled and tied together, these threads would form a fragile string more than 5 ft. long

but only 50 trillionths of an inch across.

And what a wondrous string it is. As Watson and Crick discovered in 1953, DNA consists of a double helix, re-

sembling a twisted ladder with sidepieces made of sugar and phosphates and closely spaced connecting rungs. Each rung is called a base pair because it consists of a pair of complementary chemicals called nitrogenous bases, attached end to end, either adenine (A) joined to thymine (T)



What will this baby be? Football star? Scholar?

or cytosine (C) attached to guanine (G).

Fundamental to the genius of DNA is the fact that A and T are mutually attractive, as are C and G. Consequently, when DNA separates during cell division, coming apart at the middle of each rung like a zipper opening, an exposed T half-rung on one side of the ladder will always attract an A floating freely in the cell. The corresponding A half-rung on the other section of the ladder will attract a floating T, and so on, until two double helixes, each identical to the original DNA molecule, are formed.

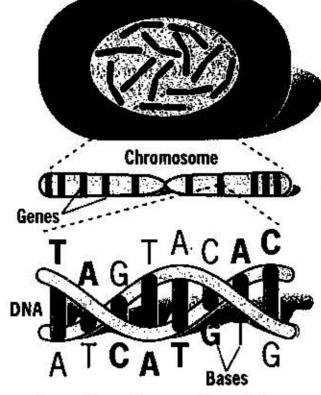
Even more remarkable, each of the four bases represents a letter in the genetic code. The three-letter "words" they spell, reading in sequence along either side of the ladder, are instructions to the cell on how to assemble amino acids into the proteins essential to the structure and life of its host. Each complete DNA "sentence" is a gene, a discrete segment of the DNA string responsible for ordering the production of a specific protein.

Reading these genetic words and deciphering their meaning is apparently a snap for the clever machinery of a cell. But for mere scientists it is a formidable and time-consuming task. For instance, a snippet of DNA might read ACGGTAGAT, a message that researchers can decipher rather easily. It codes for a sequence of three of the 20 varieties of amino acids that constitute the building blocks of proteins. But the entire genome of even the simplest organism dwarfs that snippet. The genetic blueprint of the lowly E. coli bacterium, for one, is more than 4.5 million base pairs long. For a microscopic yeast plant, the length is 15 million units. And in a human being, the genetic message is some 3 billion letters long.

ike cartographers mapping the ancient world, scientists over the past three decades have been laboriously charting human DNA. Of the estimated 100,000-odd genes that populate the genome, just 4,550 have been identified. And only 1,500 of those have been roughly located on the various chromosomes. The message of the genes has been equally difficult to come by. Most genes consist of between 10,000 and 150,000 code letters, and only a few genes have been completely deciphered. Long segments of the genome, like the vast uncharted regions of early maps, remain terra incognita.

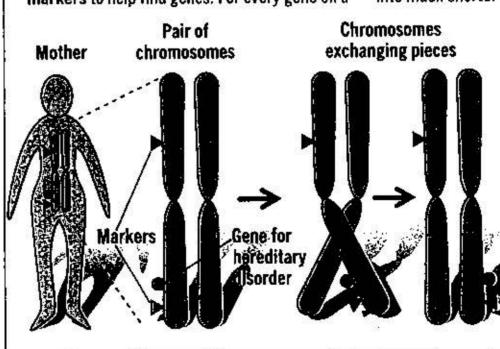
To complicate matters, between the segments of DNA that represent genes are endless stretches of code letters that seem to spell out only genetic gibberish. Geneticists once thought most of the unintelligible stuff was "junk DNA"—useless sequences of code letters that accidentally developed during evolution and were not discarded. That concept has changed. "My feeling is there's a lot of very useful information buried in the sequence," says Nobel laureate Paul Berg of Stanford University. "Some of

MAPPING CHROMOSOMES

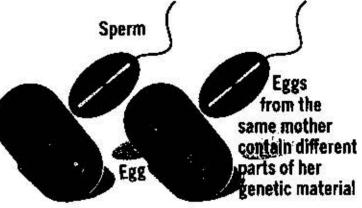


The nucleus of human cells contains a complete blueprint for a man or woman. That information resides on 46 chromosomes made primarily of long chains of DNA, the master chemical that controls the development and functioning of organisms. The crucial components of DNA are four nitrogenous bases: adenine, thymine, cytosine and guanine (A, T, C and G). The sequence of these bases determines the order in which amino acids are linked together to form proteins. A segment of the DNA chain that contains the instructions for a complete protein is called a gene.

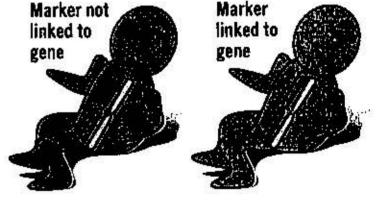
During cell division, the DNA arranges itself into 23 pairs of complementary chromosomes, each containing thousands of genes. The chromosomes in each pair have slight differences from each other that can be used as signposts or markers to help find genes. For every gene on a



chromosome, there is a corresponding gene on the other member of the chromosome pair.* One of the two genes came from the person's mother, and the other came from the father. The two genes may be the same or different, but they both affect the same characteristic.



When sperm and egg cells are formed, they contain only one member of each chromosome pair. Before the chromosome pairs separate, they exchange pieces. In the process, some genes that were together on one chromosome wind up on different chromosomes and thus go into different sperm or egg cells. The closer two genes are to each other on a chromosome, the more likely they are to stay linked and be inherited together.



That fact enables biologists to construct maps of chromosomes. To do so, the researchers must extract and analyze DNA from cells. They use a large set of chemicals known as restriction enzymes to chop up the DNA chain into much shorter pieces. Differences between

these pieces are called restriction-fragment-length polymorphisms, or RFLPs (pronounced rif-lips). Gene mappers have identified a whole catalog of RFLPs, each with its own characteristic sequence of bases. By studying how frequently certain RFLPs are inherited

An exception is a man's pair of sex chromosomes, which are called X and Y. A gene on the X chromosome does not necessarily have a complementary gene on the Y.

it we will know how to interpret; some we know is going to be gibberish."

In fact, some of the nongene regions on the genome have already been identified as instructions necessary for DNA to replicate itself during cell division. Their message is obviously detailed and complex. Explains George Bell, head of genome studies at Los Alamos National Laboratory: "It's as if you had a rope that was maybe 2 in. in diameter and 32,000 miles long, all neatly arranged inside a structure the size of a superdome. When the appropriate signal comes, you have to unwind the rope, which consists of two strands, and copy each strand so you end up with two new ropes that again have to fold up. The machinery to do that cannot be trivial."

One of the most formidable tasks faced by geneticists is to learn the nature of that machinery and other genetic instructions buried in the lengthy, still unMap showing sites of disease
genes on Chromosome 3

von Hippel-Lindau syndrome
Thyroid hormone resistance
Small cell cancer of lung
GM1-gangliosidosis
Renal-cell carcinoma

Protein S deficiency

Oroticaciduria
Propionicacidemia, pccB type
Atransferrinemia

Postanesthetic apnea
Sucrose intolerance

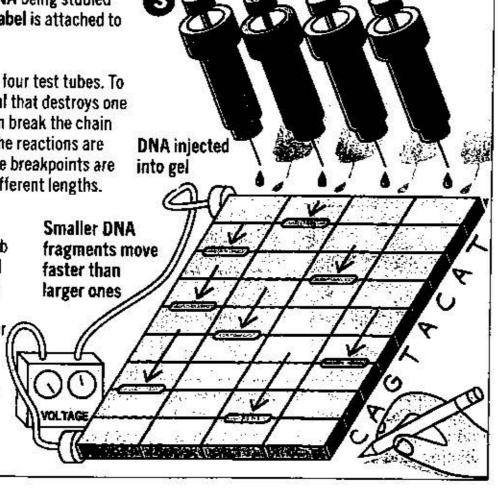
RFLPs form a valuable series of markers along the chromosomes and make it possible, in many cases, to track down the location of the genetic defect that causes a disease. DNA from many patients must be analyzed for the presence of telltale RFLPs. If a particular RFLP is always found in people with a certain disease, then the gene that causes the condition is likely to be close to that RFLP on its chromosome.

SEQUENCING GENES

1 Through a process known as gene cloning, thousands of copies of the DNA being studied are made and a radioactive label is attached to one end of a single stand.

2 The DNA is separated into four test tubes. To each tube is added a chemical that destroys one of the four bases and thus can break the chain wherever that base occurs. The reactions are stopped before all the possible breakpoints are split, yielding fragments of different lengths.

3 The DNA is removed from each tube and applied to a slab of gel. An electric field is used to move the DNA through the gel. Smaller pieces move faster than larger pieces. After a time, the radioactive labels show up as distinctive bands that are visible in the gel. The pattern of the bands reveals the order of the bases in the original DNA chain.



Chemical

destroys

Chemical

destroys

Cloned

DNA

Chemical

destroys

deciphered base sequences. To do so fully requires achievement of the project's most challenging goal: the "sequencing" of the entire human genome. In other words, the identification and listing in order of all the genome's 3 billion base pairs.

That effort, says Caltech research fellow Richard Wilson, "is analogous to going around and shaking hands with everyone on earth." The resulting string of code letters, according to the 1988 National Research Council report urging adoption of the genome project, would fill a million-page book. Even then, much of the message would be obscure. To decipher it, researchers would need more powerful computer systems to roam the length of the genome, seeking out meaningful patterns and relationships.

It was from the patterns and relationships of pea plants that a concept of heredity first arose in the mind of Gregor Mendel, an Austrian monk. In 1865, after studying the flower colors and other characteristics of many generations of pea plants, Mendel formulated the laws of heredity and suggested the existence of packets of genetic information, which became known as genes. Soon afterward, chromosomes were observed in the nuclei of dividing cells, and scientists later discovered a chromosomal difference between the sexes. One chromosome, which they named Y, was found in human males' cells, together with another, called X. Females' cells, on the other hand, had two copies of X.

Radioactive

label

Chemical

destroys

ut it was not until 1911 that a gene, only a theoretical entity at the time, was correctly assigned to a particular chromosome. After studying the pedigrees of several large families with many color-blind members (males are primarily affected), Columbia University scientist E.B. Wilson applied Mendelian logic and proved that the trait was carried on the X chromosome. In the same manner over the next few decades, several genes responsible for such gender-linked diseases as hemophilia were assigned to the X chromosome and a few others attributed to the Y.

Scientists remained uncertain about the exact number of human chromosomes until 1956, when improved photomicrographs of dividing cells clearly established that there were 46. This revelation led directly to identification of the cause of Down syndrome (a single extra copy of chromosome 21) and other disorders that result from distinctly visible errors in the number or shape of certain chromosomes.

But greater challenges lay ahead. How could a particular gene be assigned to any of the nonsex chromosomes? Scientists cleverly tackled that problem by fusing human cells with mouse cells, then growing hybrid mouse-human cells in the laboratory. As the hybrid cells divided again and again, they gradually shed their human chromosomes until only one—or simply a fragment of one—was left in the nucleus of each cell.

By identifying the kind of human protein each of these hybrid cells produced, the researchers could deduce that the gene responsible for that protein resided in the surviving chromosome. Using this method, they assigned hundreds of genes to specific chromosomes.

Finding the location of a gene on a chromosome is even more complicated. But over the past several years, scientists have managed to draw rough maps of all the chromosomes. They determine the approximate site of the genes, including many associated with hereditary diseases, by studying patterns of inheritance in families and chopping up their DNA strands for analysis. With this technique, they have tracked down the gene for cystic fibrosis in

Science

the midsection of chromosome 7, the gene for a rare form of colon cancer midway along the long arm of chromosome 5, and the one for familial Alzheimer's disease on the long arm of chromosome 21.

One of the more dramatic hunts for a disease gene was led by Nancy Wexler, a neuropsychologist at Columbia University and president of the Hereditary Disease Foundation. Wexler was highly motivated; her mother died of Huntington's disease, a debilitating and painful disorder that usually strikes adults between the ages of 35 and 45 and is invariably fatal. This meant that Wexler had a 50% chance of inheriting the gene from her mother and contracting the disease.

In a search coordinated by Wexler's foundation, geneticist James Gusella of Massachusetts General Hospital discovered a particular piece of DNA, called a genetic marker, that seemed to be present in people suffering from Huntington's disease. His evidence suggested that the marker must be near the Huntington's disease gene on the same chromosome, but he needed a larger sample to confirm his findings. This was provided by Wexler, who had previously traveled to Venezuela to chart the family tree of a clan of some 5,000 people, all of them descendants of a woman who died of Huntington's disease a century ago. Working with DNA samples from affected family members, Gusella and Wexler in 1983 concluded that they had indeed found a Huntington's marker, which was located near one end of chromosome 4.

That paved the way for a Huntington's gene test, which is now available. The actual gene has not yet been isolated and since there is no cure at present, many people at risk for Huntington's are reluctant to take it. "Before the test," Wexler says, "you can always say, 'Well, it can't happen to me.' After the test, if it is positive, you can't say that anymore." Has Wexler, 43, taken the test? "People need to have some privacy," she answers.

Tracking down the location of a gene requires tedious analysis. But it is sheer adventure when compared with the task of determining the sequence of base pairs in a DNA chain. Small groups of scientists, working literally by hand, have spent years simply trying to sequence a single gene. This hands-on method of sequencing costs as much as a dollar per base pair, and deciphering the entire genome by this method might take centuries.

The solution is automation. "It will improve accuracy," says Stanford's Paul Berg. "It will remove boredom; it will accomplish what we want in the end." The drive for automation has already begun; a machine designed by Caltech biologist Leroy Hood can now sequence 16,000 base pairs a day. But Hood, a member of the Genome Advisory Committee, is

hardly satisfied. "Before we can seriously take on the genome initiative," he says, "we will want to do 100,000 to a million a day." The cost, he hopes, will eventually drop to a penny per base pair.

Hood is not alone in his quest for automation. That is also the goal of Columbia University biochemist Charles Cantor, recently appointed by the Energy Department to head one of its two ge-

HOW GENE THERAPY MIGHT WORK granding and a 117 (19.313.) marovėnie taken from I patient Inside the defective cell, .. the virus inserts DNA, including the normal gene, into the cell's DNA. Bone-marrow The corrected bone-marrow cells are then injected back into the patient and multiply into a colony of healthy marrow cells. Bone marrow

nome centers. "It's largely an engineering project," Cantor explains, intended to produce tools for faster, less expensive sequencing and to develop data bases and computer programs to scan the data. Not to be outdone, Japan has set up a consortium of four high-tech companies to establish an automated assembly line, complete with robots, that researchers hope will be capable of sequencing 100,000 base pairs a day within three years.

Is there a better way? In San Francisco in January, Energy Department scientists displayed a photograph of a DNA strand magnified a million times by a scanning tunneling microscope. It was the first direct image of the molecule. If

sharper images can be made, the scientists suggested, it may be possible to read the genetic code directly. But that day seems very far off.

Even before the Human Genome Project was begun by the NIH, others were deeply involved in probing the genome. Building on a long-standing program of research on DNA damage caused by radiation, biologist Charles DeLisi in 1987 persuaded the Energy Department to launch its own genome program. In addition to the sequencer and computer-hardware engineering projects, Energy Department scientists are focusing their attention on mapping seven complete chromosomes.

ictor McKusick, a geneticist at Johns Hopkins University, was in the game much earlier. He has been cataloging genes since 1959, compiling findings in his regularly updated publication, Mendelian Inheritance in Man. In August 1987 he introduced an electronic version that scientists around the world can tap into by computer. At the end of December it contained information on all the 4,550 genes identified to date. Says McKusick: "That's an impressive figure, but we still have a long way to go." Several other libraries of genetic information are already functioning, among them GenBank at the Los Alamos National Laboratory and the Howard Hughes Medical Institute's Human Gene Mapping Library in New Haven, Conn.

McKusick also directs the Human Genome Organization (known informally as "Victor's HuGO"), a group formed last September in Montreux, Switzerland, by 42 scientists representing 17 nations. "The U.N. of gene mapping," as McKusick describes it, plans to open three data-collection and -distribution sites, one each in Japan, North America and Europe.

Geneticist Ray White, formerly at M.I.T., has established a major center for genetic-linkage mapping at the University of Utah in Salt Lake City. In 1980 he began a study of 50 large families, collecting their blood samples, extracting white blood cells, which he multiplies in cell cultures, then preserving them in freezers.

Working with family pedigrees and DNA extracted from the cell bank, White and his group have identified more than 1,000 markers, each about 10 million base pairs apart, on all the chromosomes. They have also been major contributors to the Center for the Study of Human Polymorphisms, set up in Paris by French Nobel laureate Jean Dausset to coordinate an international effort to map the genes. Of the 40 families whose cell lines reside in CEPH's major data banks, 27 have been provided by White's group.

How and if these and other genetic research efforts will be coordinated with the Human Genome Project is a question

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being pondered by director Watson and his advisory committee. "Right now," says Watson, "the program supports people through individual research grants. We have to build up around ten research centers, each with specific objectives, if we want to do this project in a reasonable period of time."

The effort will also include studies of genes in other organisms, such as mice and fruit flies. "We've got to build a few places that are very strong in mouse ge-

netics," Watson says, "because in order to interpret the human, we need to have a parallel in the mouse." Explains Genentech's Botstein: "Experimentation with lower organisms will illuminate the meaning of the sequence in humans." For example, genes that control growth and development in the fruit fly are virtually identical to oncogenes, which cause cancer in humans.

ne of the early benefits of the genome project will be the identification of more and more of the defective genes responsible for the thousands of known inherited diseases and development of tests to detect them. Like those already used to find Huntington's and sickle-cell markers, for example, these tests will allow doctors to predict with near certainty that some patients will fall victim to specific genetic diseases and that others are vulnerable and could be stricken.

University of Utah geneticist Mark Skolnick is convinced that mapping the genome will radically change the way medicine is practiced. "Right now," he says, "we wait for someone to get sick so we can cut them and drug them. It's pretty old stuff. Once you can make a profile of a person's genetic predisposition to disease, medicine will finally become predictive and preventive."

Eventually, says Mark Guyer of the NIH's Human Genome Office, people might have access to a computer readout of their own genome, with an interpretation of their genetic strengths and weaknesses. At the very least, this would enable them to adopt an appropriate life-style, choosing the proper diet, environment and—if necessary—drugs to minimize the effects of genetic disorders.

The ever improving ability to read base-pair sequences of genes will enable researchers to speed the discovery of new proteins, assess their role in the life processes, and use them—as the interferons and interleukins are already used—for fighting disease. It will also help them pinpoint missing proteins, such as insulin, that can correct genetic diseases.

Mapping and sequencing the genes should accelerate progress in another highly touted and controversial discipline: gene therapy. Using this technique, scientists hope someday to cure genetic diseases by actually inserting good genes into their patients' cells. One proposed form of gene therapy would be used to fight beta-thalassemia major, a blood disease characterized by severe anemia and caused by the inability of hemoglobin to function properly. That



"I see an extraordinary" potential for human betterment ahead of us.

The time to act is now."

-JAMES WATSON

inability results from the lack of a protein in the hemoglobin, a deficiency that in turn is caused by a defective gene in bone-marrow cells.

To effect a cure, doctors would remove bone-marrow cells from a patient and expose them to a retrovirus* engineered to carry correctly functioning versions of the patient's faulty gene. When the retrovirus invaded a marrow cell, it would insert itself into the cellular DNA, as retroviruses are wont to do, carrying the good gene with it. Reimplanted in the marrow, the altered marrow cells would take hold and multiply,

*A virus consisting largely of RNA, a single-stranded chain of bases similar to the DNA double helix.

churning out the previously lacking protein and curing the thalassemia patient.

Easier said than done. Scientists have had trouble getting such implanted genes to "turn on" in their new environment, and they worry about unforeseen consequences if the gene is inserted in the wrong place in a chromosome. Should the gene be slipped into the middle of another vital gene, for example, it might disrupt the functioning of that gene, with disastrous consequences.

Also, says M.I.T. biologist Richard Mulligan, there are limitations to the viral insertion of genes. "Most genes," he explains, "are too big to fit into a retrovirus."

Undaunted, researchers are refining their techniques in experiments with mice, and Mulligan believes that the first human-genetherapy experiments could occur in the next three years. Looking further ahead, other scientists are experimenting with a kind of genetic microsurgery that bypasses the retrovirus, mechanically inserting genes directly into the cell nucleus.

Not only those with rare genetic disorders could benefit from the new technology. Says John Brunzell, a University of Washington medicine professor: "Ten years ago, it was thought that only 10% of premature coronary heart disease came from inherited abnormalities. Now that proportion is approaching 80% to 90%."

Harvard geneticist Philip Leder cites many common diseases-hyper-tension, allergies, diabetes, heart disease, mental illness and some (perhaps all) cancers—that have a genetic component. Unlike Huntington's and Tay-Sachs diseases, which are caused by a single defective gene, many of these disorders have their roots in several errant genes and would require genetic therapy far more sophisticated than any now even being contemplated. Still, says Leder, "in the end, genetic map-

ping is going to have its greatest impact on these major diseases."

Of all the enthusiasm that the genome project has generated among scientists and their supporters in Washington, however, none matches that of James Watson as he gears up for the monumental task ahead. "It excites me enormously," he says, and he remains confident that it can be accomplished despite the naysayers both within and outside the scientific community. "How can we not do it?" he demands. "We used to think our fate was in our stars. Now we know, in large measure, our fate is in our genes." —Reported by J. Madeleine Nash/San Francisco and Dick Thompson/Washington

The Perils of Treading on Heredity

Uncontrolled tampering with DNA could stir up a host of ethical dilemmas



BY PHILIP ELMER-DEWITT

The prospect is intoxicating. By mapping and manipulating tiny genes, man could conceivably conquer diseases, improve upon

his natural abilities and perhaps even control his own destiny. But just because miracles might someday be possible does not necessarily mean that they should all be performed. The tools of molecular biology have enormous potential for both good and evil. Lurking behind every genetic dream come true is a possible Brave New World nightmare. After all, it is the DNA of human beings that might be tampered with, not some string bean or laboratory mouse. To unlock the secrets hidden in the chromosomes of human cells is to open up a host of thorny le-

gal, ethical, philosophical and religious issues, from invasion of privacy and discrimi-

nation to the question of who should play

God with man's genes.

XYY chromosome pattern and criminal behavior. In 1965 a study of violent criminals in a Scottish high-security mental institution found that a surprisingly high percentage had a particular chromosomal abnormality: in addition to the X and Y chromosomes normally found in men, each carried an extra Y, or "male" chromosome. The press and public seized on the idea that these so-called supermales were genetically predestined to a life of crime. That interpretation proved false. Further investigations showed that the

vast majority of men with the XYY pattern—an estimated 96%—lead relative-

ly normal lives. But before the matter was put to rest, a variety of measures were proposed to protect society from the perceived threat. One group of scientists urged massive prenatal screenings, presumably to allow parents to arrange for abortions. Others initiated long-range studies to identify XYY infants and track their progress over the years through home visits, psychological tests and

The opportunities and dilemmas created by the new genetic knowledge begin even before birth. It is already possible, through a variety of prenatal tests, to determine whether a child will be a boy or a girl, retarded or crippled, or the victim of some fatal genetic disorder. The question of what to do with that information runs squarely into the highly charged issue of abortion. Many could sympathize with a woman who chooses to terminate a pregnancy rather than have a baby doomed to a painful struggle with, say, Tay-Sachs disease or Duchenne muscular dystrophy. But what about the mother of three daughters who wants to hold out for a son? Or the couple that one day may be able to learn whether an unborn baby has a minor genetic blemish? Only the most hardened pro-choice advocate would argue that prospective parents have the right to abort fetus after fetus until they get the "perfect" baby.

Complicating such decisions is the fact that genetic prognostication will probably never be an exact science. Technicians may someday be able to determine that a fetus has a predisposition to heart disease, certain cancers, or a variety of psychiatric illnesses. But they will not be able to predict precisely when—or even if—the affliction will strike, how severe it will be and how long and good a life the baby can expect. As scientists learn to detect ever more minute imperfections in a strand of DNA, it will become increasingly difficult to distinguish between genetic abnormalities and normal human variability. "We haven't thought much about how to draw the line," admits Arthur Caplan, director of the Center for Biomedical Ethics at the University of Minnesota. "It is going to be one of the key ethical challenges of the 1990s."

History shows that genetic misinformation can be severely damaging. Take, for example, the supposed link between the

teacher questionnaires. These dubious efforts were eventually abandoned, but not before a group of innocent youngsters had been unfairly labeled as somehow inferior.

Adults could be wrongly branded as well. Life- and medical-insurance companies might one day require that potential customers have their genes screened, presumably so that people likely to develop fatal or disabling diseases could be charged higher premiums, or possibly turned away. Insurers have already used a similar policy to avoid covering individuals at high risk for AIDS, a practice now banned in several states. Unless it is prohibited by law, employers could conceivably try to guarantee a healthy work force by asking job applicants to submit to genetic screening. Clearly, there is a potential for widespread discrimination against those whose genes do not meet accepted standards.

Once someone's genes have been screened, the results could find their way into computer banks. Without legal restrictions, these personal revelations might eventually be shared among companies and government agencies. Just like a credit rating or an arrest record, a DNA analysis could become part of a person's permanent electronic dossier. If that happens, one of the last vestiges of individual privacy would disappear.

Even if genetic information is kept private, the knowledge gained can be profoundly troubling to the individuals involved. It is one thing to uncover a genetic enzyme deficiency that can be effectively treated through diet. But what about people who fear they have inherited a debilitating disease for which there is yet no treatment or cure? Some might want advance knowledge so they can prepare their families and put what is left of their lives in order. Others might prefer not knowing anything at all. "We may be able to see into the future," says Doreen Markel, a genet-

ic counselor at the University of Michigan's Neurology Clinic. "But ask yourself: Do you really want to know what you're going to die of?"

The questions multiply as the science progresses. Thomas Murray, director of the Center for Biomedical Ethics at Case Western Reserve University, acknowledges that some people are worried that a complete map of the genome might somehow "diminish our moral dignity ... reduce us somehow to nothing more than the chemical constituents of our bodies." But knowing the entire sequence of DNA base pairs is like having the full musical notation of Beethoven's Ninth Symphony, he says. "In no way does that knowledge diminish the grandeur of the symphony itself."

University of Washington ethicist Albert Jonsen is concerned that people with grave illnesses might be viewed simply as carriers of genetic traits. "Rather than saying 'Isn't that family unfortunate to have a schizophrenic son,' we'll say 'That's a schizophrenia family." Advocates for the handicapped fear that in the future the physically afflicted may no longer be seen as unfortunates worthy of special treatment, but as "wrongful births," genetic errors committed by parents who failed to take proper action against a defective gene.

To speak in terms of eliminating genetic defects is to tread on slippery scientific and ethical ground. As any biologist will testify, genetic variety is the spice of life, a necessary ingredient to the survival of a species. Genes that are detrimental under certain conditions may turn out to have hidden benefits. Sickle-cell anemia, for example, is a debilitating blood disease suffered by people of African descent who have two copies of an abnormal gene. A person who has only one copy of the gene, however, will not be stricken with anemia and will in fact have an unusual resistance to malaria. That is why the gene remains common in African populations.

Even to label genes as defective can be dangerous. In the 19th century new discoveries about heredity and evolution gave clearly that their primary goal is the elimination and cure of disease and disability."

The possibilities for gene therapy will be limited for the near future. If gene transplants are performed on tissue cells-bonemarrow cells, for instance—the altered genes will die with the patient; they cannot be passed on to any children the patient might subsequently have. Someday, however, it may be possible to change genes in germ cells, which give rise to sperm or eggs. If that feat is accomplished, the new genes would be transmitted to one generation after another.

hat is what most frightens the foes of genetic engineering. If biologists can change the course of heredity, they can try to play God and influence human destiny. In 1983 activist Jeremy Rifkin, a longtime opponent of many kinds of genetic research, and several dozen theologians mounted an unsuccessful effort to persuade Congress to ban all experiments on human germ cells. Said Avery Post, president of the United Church of Christ, at the time: "We're not good enough or responsible enough. There is no question about it. We will abuse this power."

No geneticist is currently planning to transfer genes to human germ cells. Even though mankind has been playing God since biblical times, rearranging the germ lines of crops and farm animals to suit human needs, researchers do not advocate extending such genetic tinkering to people. But medical scientists have an obligation to protect humanity against disease and pestilence. Once it becomes possible to eradicate a gene that causes a fatal disorder, and thus keep it from passing to future generations, it will be criminal not to do so. As director of the Human Genome Project, James Watson contends that the research has a crucial humanitarian mission. Says he: "The object should not be to get genetic information per se, but to improve life through genetic information."

Fortunately, the most ardent supporters of genetic research are the first to admit the potential for abuse and see the need for ground rules. Many ethicists and scientists who

rise to the eugenics movement—a misguided have studied the issues agree on certain

pseudo science whose followers thought that undesirable traits should be systematically purged from the human gene pool. Believers ranged from the American eugenicists of the early 1900s, who thought humans should be bred like racehorses, to the German geneticists who gave scientific advice to the leaders of the Third Reich, instructing them on how the species might be "purified" by selective breeding and by exterminating whole races at a time.

No geneticist today would even talk about creating a master race. Scientists are careful to point out that experiments in gene therapy will be aimed at curing hereditary disease and relieving human suffering, not at producing some sort of superman. But what if people want to use the technology to improve genes that are not defective but merely mediocre? Could genetic engineering become the cosmetic surgery of the next century? Will children who have not had their genes altered be discriminated against?

Scientists agree that it would be reprehensible to try to move too far in the direction of genetic uniformity. "The improvement and enhancement of genetics to some sort of optimum is not a function of medicine," observes the University of Minnesota's Caplan. "Very soon the medical fields are going to have to state

basic principles:

- ▶Individuals should not be required to submit to genetic testing against their will.
- Information about people's genetic constitution should be used only to inform and never to harm.
- ▶ The results of a genetic assay should be held in strict confidence.
- Genetic engineering in humans should be used to treat diseases, not to foster genetic uniformity.

Knowledge is power, the saying goes. It can be dangerous, but it can just as easily be used wisely. "I do have faith," says Case Western's Murray. "Not that the judgment of people is always right, but that eventually we will preserve a good measure of fairness and justice. If we can absorb Copernicus and Galileo, if we can absorb Darwin and Freud, we can certainly absorb mapping the human genome."

One thing is certain: the genie cannot be put back into the bottle. Like atomic energy, genetic engineering is an irresistible force that will not be wished or legislated away. The task ahead is to channel that force into directions that save lives but preserve humanity's rich genetic heritage. -Reported by Andrea Dorfman/ New York and J. Madeleine Nash/San Francisco

People

BY HOWARD G. CHUA-EOAN



Mazel Tov Vobiscum

These two aren't quite Laurel and Hardy, but they certainly are an odd couple. ED KOCH, New York City's mayor, is plummeting in popularity just as he's up for re-election. JOHN CARDINAL O'CONNOR, the city's other top pol (and its Archbishop), is riding high as a leader of American Catholic orthodoxy. So what are they up to with His Eminence and Hizzoner, a co-authored volume of their opinions due to appear in bookstores this week? Close friends, they turn out to have many similar views—except for campalgning. Koch, a Jew, hopes the book will shore up his Catholic support. O'Connor pledges churchly neutrality toward all candidates.

Fielding Fidel

"If we'd known he wanted to be a dictator, we'd have made him an umpire," says



an observer from Fidel Castro's baseball days. The Cuban leader's early career aspirations are featured in "Legends of Minor League Baseball," a newly released deck of cards. A promising young pitcher, Castro tried out with the now defunct Washington Senators. But he was never signed. After the revolution, he'd throw occasionally for a Cuban army team during exhibition season. The card notes: "In those games, he was always clobbered unmercifully but was never removed-after all, what manager would dare yank Fidel!" Ifthe Senators had signed him, they might still be on top.

Forbidding Fruit

She played an activist in Silkwood, but offscreen. Meryl Streep is more likely to be found raising her children than pushing causes. Yet there she was before a press conference in Washington, launching Mothers and Others for Pesticide Limits. The deeply private actress, who chairs the campaign, is alarmed at a report by the Natural Resources Defense Council that preschool children are routinely exposed to dangerous levels of chemicals in fruits and vegetables. Said Streep: "I feel as a parent I have absolutely no choice but to come out and speak out and join others to alert the populace at large." Streep added, "You



don't want to feel you have to be a biochemist to do the shopping." It's not a plum role.



All Play and No Work

"Well," as Ronald Reagan would say, when Nancy's away... The former President was not quite admitting to goofing off, but he did accept an 8-ft. surfboard from the students at Pepperdine University, where he delivered a speech. Don't expect to see him having fun, fun, fun on

the surf, though. There is a lot of work to be done at his new Bel Air residence. With Nancy on a New York City trip, Reagan was alone unpacking crates from their White House years, and he couldn't find his heating pad! He also confessed to writer's block while toiling on his memoirs. Said he: "I tell you, I sit there looking at those blank pages." Perhaps his new digs need a ghost or two.



Call Him Sir

When critics call him rude, Miles Davis likes to remind them that he is a knight, having been granted that honor by Spain. Says the visionary jazz trumpet player: "People say, 'He turns his back to you in concerts' and stuff like that, and they don't even call me sir." To reimpress his prerogatives on the world. Davis begins a tour next month. In May he releases a new album, and in September his autobiography will be out. Sir Miles is also delving into go-go, hip-hop and other musical styles. Says he: "I've been listening to elephant and whale sounds." Heavyweight sounds for a heavyweight musician,

Don't Fence Him In

Even while a new frontier beckons—an ABC-TV newsmagazine with DIANE SAWYER as co-anchor—SAM DONALDSON has decided to return to his roots. Last week he and his wife JAN bought a 7,300-acre ranch in Roswell, N. Mex. Said the sharp-fanged Donaldson: "We're not speculating or trying to subdivide the area. We want a working ranch, not some fruff!" Donaldson seems to have developed his scrappy ways while growing up on the family farm in New Mexico. At the age of seven, he wrote, "I playfully shot out a front tooth of one of the Mexican workers with my BB gum." And when he was twelve: "I got a kick out of letting the horses out of their corral so I could chase after them on a farm tractor. Ride 'em, cowboy!"



Dressed for Success

Fifteen years have passed since Princess Elizabeth of Toro appeared in a golden robe, her hair a cornrowed crown, and electrified the U.N. Uganda's best-known diplomat, noblewoman and model has survived her country's volatile politics, including the rule of Idi Amin. Af-

ter her husband's death in 1987, she declined a post in Paris and worked quietly on memoirs, due in August. Says she: "There is a time to weigh what you are doing." But she is re-emerging. Next week she will show up in Fame magazine, clad in a Valentino and photographed by Francesco Scavullo. All proper homage for a princess born east of the Mountains of the Moon.

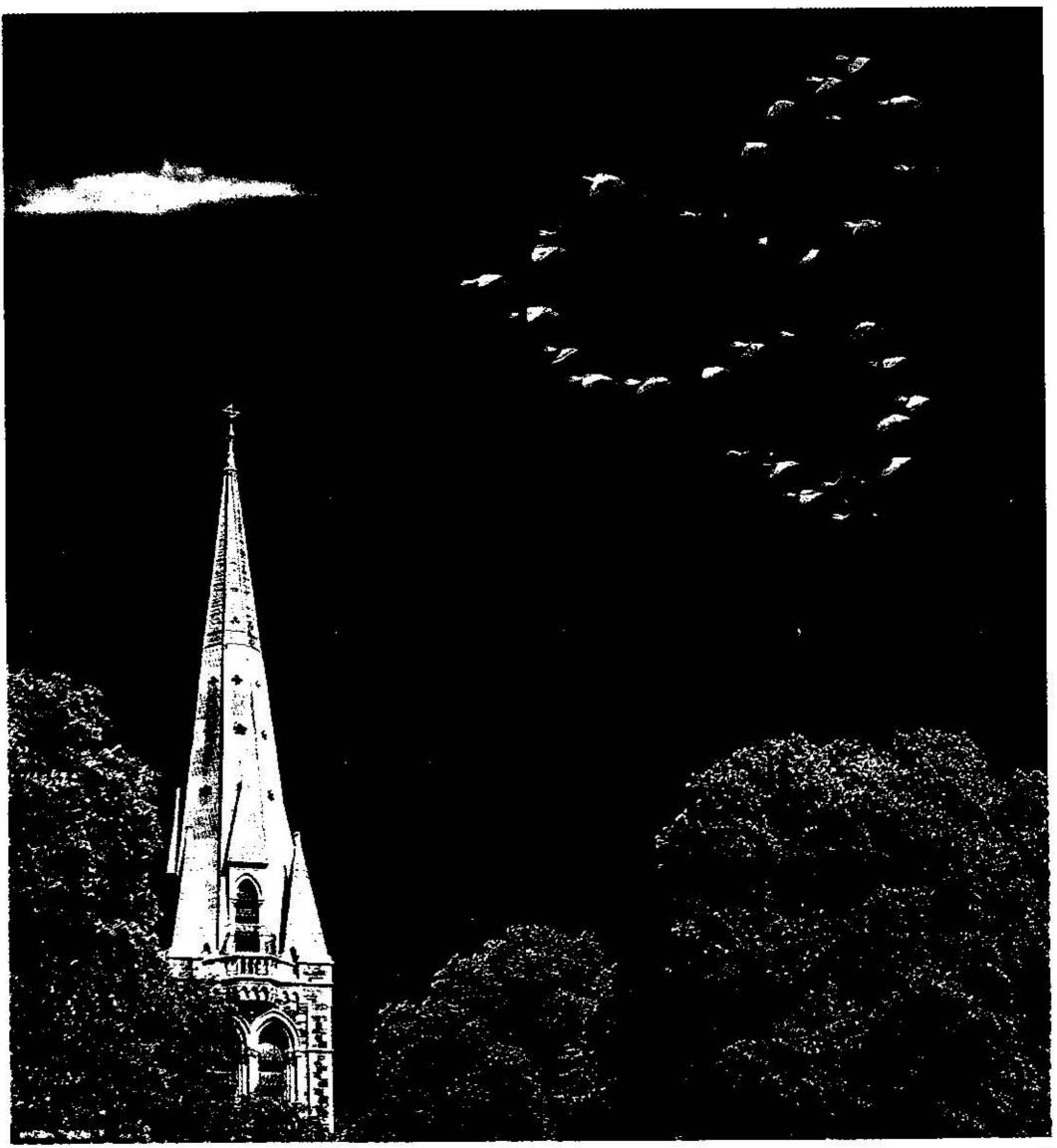
No Canto Do

A \$5.2 million bounty is strong incentive to track down a living author. But what if the writer is already dead? Blow up his tomb. That was the threat posed by the shadowy Guardians of the Revolution against **Dante Alighieri's** monument in Ravenna. Italy. More than 600 years ago, the poet of the *Divine Comedy* placed the prophet Muhammad in the eighth circle of hell, "cleft from chin to the



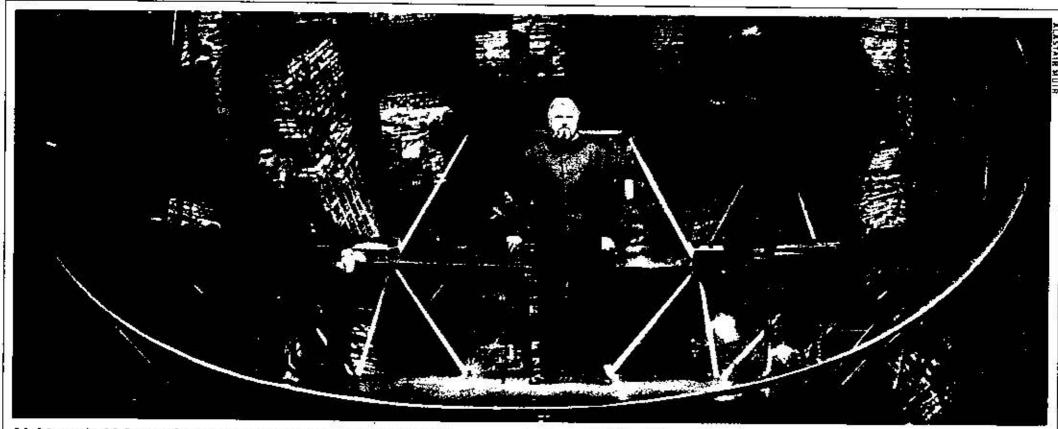
part that breaks wind." The Guardians turned out to be a local prankster. "It was only a joke," he said at his arrest. Consign him to the Inferno!

THAI FLIES SOUTH FOR THE SUMMER. TO CHRISTCHURCH, NEW ZEALAND.



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Theater



Lights and whizbangs for a visionary dictator: aided by Paul Keown as a technocrat, Brian Blessed, center, oversees his Metropolis

Triumphs Great and Small

The West End is having one of its richest recent seasons

BY WILLIAM A. HENRY III LONDON

I hile Broadway spent much of the '80s in thrall to the British musical, in truth the heralded explosion of talent was basically two people, composer Andrew Lloyd Webber (Phantom of the Opera) and director Trevor Nunn (Chess, Les Misérables) or, sometimes, the two together (Cats, Starlight Express). Those old reliabies have new work under way. Lloyd Webber's Aspects of Love, a chamber piece deliberately unlike his trademark epics, opens in the West End next month under Nunn's direction, while Cameron Mackintosh has reunited with the French authors of Les Misérables to create Miss Saigon, a story of doomed romance between an American soldier and a Vietnamese woman, slated to debut in September. But if the musical on either side of the Atlantic is to thrive, it desperately needs fresh voices.

Thus a lot more was at stake at last week's opening than the \$4.25 million budget for Metropolis, a lavish and propulsive musical adaptation of Fritz Lang's 1927 futuristic film. The show brings together a new international team: from Hollywood, composer and co-author Joe Brooks, best known for his religiously inspired Oscar-winning song You Light Up My Life; from London's avant-garde, coauthor Dusty Hughes, whose plays have been produced by the Royal Shakespeare Company and the National Theater; and from Paris, director Jérôme Savary, who created a troupe called the Magic Circus Company and who now runs the French government-financed Théâtre de Chaillot. It is hard to imagine many projects

that could usefully combine spiritual faith, populist politics and necromantic special effects. But as it turns out, precisely that combination makes *Metropolis* a rousing and at times spellbinding addition to a West End season that's already one of the richest in recent memory. If the story is sometimes silly and the lyrics are frequently flat, those failings are overcome by the score's frequent surges of emotion and a spectacle second to none.

Metropolis is set in an unspecified time and place in which natural-energy sources have all but disappeared. Vast expenditures of human energy by enslaved drones in the bowels of the earth are needed to run the machines that provide luxury up on the glittering surface for a privileged few "élitists." Presiding over this evil empire is John Freeman (Brian Blessed), in equal parts visionary genius and dictator. A fledgling rebellion among the workers is galvanized when Freeman's implausibly innocent son (Graham Bickley) sneaks below and falls in love with the rebel leader Maria (Judy Kuhn). Freeman, outraged, repudiates his son and begins an all-out war against his Luddite serfs. The action takes place amid an opulent panoply of sets. What looks like a solid steel wall in the first scene peels back to reveal a stageful of apparently immovable machinery. That in turn slides away to make room for the flying-saucer capsule of multicolored lights and whizbangs in which Freeman lives, the blue-and-white pulsating laboratory tubes of a Dr. Frankenstein-style subordinate, and the romantic Art Deco night skyline of the city. At points the stage fills

with smoke or fire; big see-through elevators hover in midair; sometimes actors vanish and mysteriously reappear. The music can be just as impressive: in 101.11, the massed workers throb with the demonic energy of the machines; in You Are the Light, Kuhn infuses the downtrodden with spiritual hope; in Metropolis, Blessed poignantly evokes a dream gone astray.

Metropolis joins a West End scene featuring new or newly adapted plays by Alan Ayckbourn. Tom Stoppard and David Hare, among others, plus star vehicles and superb Shakespeare, including a brilliant rereading of The Tempest as a story of vengeance, starring John Wood, and competing versions of the history cycle known as the Wars of the Roses. The best new work, Single Spies, is a pair of oneacts focusing on the defector Guy Burgess and the erstwhile Soviet mole Anthony Blunt. The former piece was filmed as An Englishman Abroad with Alan Bates as a puckish, seductive Burgess. In the stage version, directed by author Alan Bennett, actor Simon Callow evokes a sadder, more sodden man moldering in Moscow. In the companion play, Callow directs Bennett as Blunt, who, after admitting treason, was allowed to continue as the Queen's adviser on pictures; the most discussed scene features veteran actress Prunella Scales depicting the Queen herself, for what is said to be the first time in any West End show, in a performance neatly balanced between tribute and parody. For acting, the greatest pleasure on offer is Sir Alec Guinness's first foray onto a London stage in a dozen years, as a Soviet arms negotiator in A Walk in the Woods. American playwright Lee Blessing's tragicomic musing on the nature of nuclear superpowers. The play is as intimate as Metropolis is colossal. Together, they show why London theater remains the envy of the English-speaking world.



The bug in the back bedroom: Baryshnikov, transmuted into insecthood, scuttles and writhes

A Nightmare Without Force

METAMORPHOSIS Adapted by Steven Berkoff from a story by Franz Kafka

n a Broadway season when eight of the eleven new plays have been comedies, three of them sex farces, and the cheapest of four new musicals cost \$5 million to stage, it is heartening to see work as simple, spare and serious as Metamorphosis. One just wishes it were better. Despite an effective stage-acting debut by dancer Mikhail Baryshnikov, the most ballyhooed highbrow event in the theater so far this year is all but bereft of emotional force. At the finale, two actresses stand rigid, their cheeks glazed with tears, yet much of the audience reacts only with uneasy titters. Director Steven Berkoff's highly stylized script and direction circle around the story, adding layer upon layer of ornament, when what is needed is a clean, quick cut to the emotional core of an incident as simple as it is mysterious.

Nothing is wrong with the source material, which has inspired countless other stage adaptations. Franz Kafka's story of a man who one day wakes up as a giant insect has provided one of the 20th century's hallmark nightmare images. The essence of the horror is that there is no explanation for it, no deeper meaning, no instructive or redemptive metaphor: the suffering just is. In the transmutation of Gregor Samsa, the world ceases to be predictable or rational; natural and moral order disappear. Critics have found in Kafka's vision hints of everything from the Holocaust to AIDS. But to burden the story with greater weight is in fact to lessen it. The thump in the gut comes from the literal details. The man who used to hurry to work now scuttles beneath the bed; the fastidious fellow who loved milk now detests "the fresher foods" and slurps deafeningly over anything decayed. When he agonizes with wounds inflicted by members of his family, they cannot bear to touch him to help heal him.

Berkoff manages to convey the essence of the dilemma for Gregor's parents and sister, albeit without the least sympathy for their natural anxiety and revulsion. He is far more interested in portraying them as grasping and money mad, in a Marxist gloss on the plight of the worker. They are so coarse and reprehensible—more animalistic when eating than the bug in the back bedroom—that there is no point of connection for the audience, certainly no creative tension between expecting the family to take a noble course and knowing why it succumbs to a selfish one.

It is not quite right to say the performances are bad. Presumably at Berkoff's behest, they are as exaggerated as in a Victorian melodrama, the emotional colors underlined by music as tinkly or percussive as in Beijing opera. In a further attempt to weight the scales in favor of the sensitive outcast, Baryshnikov's speeches are candidly written and delivered with touching directness. Most remarkable, however, are his agility and grace in evoking the lumbering, graceless creature. Skittering across the floor, or toppled over backward and trying to right himself, or dangling from the spider web of piping that represents a ceiling, Baryshnikov is completely believable as both misfortunate man and --- W.A.H. III misunderstood beast.

Way Stations

THE HEIDI CHRONICLES

By Wendy Wasserstein

memoir play begin but at a high school sock hop? The smartest girl in class sits alone, of course, equally terrified that no one will ask her to dance or that someone may. Where would the action predictably jump to next but a combined college mixer and "Clean for Gene" McCarthy rally? What way stations are then more obligatory than a protest, a consciousness-raising session, a TV talk show and a mistrustfully viewed "ladies' lunch"?

As a portrait of a generation, Wendy Wasserstein's new play is more documentary than drama, evoking fictionally all the right times and places but rarely attaining much thorny particularity about the people who inhabit them. The plot, such as it is, often seems like an unconscious cartoon of feminist dialectic. Two men stay close to the title character through the years: a pediatrician who is handsome, earnest, dedicated, kind, politically correct from a left-wing perspective and irreversibly gay, and a heterosexual who is grasping, impatient, domineering, shallow, as undependable as quicksilver and, for Heidi, sexually irresistible. This is the there-are-no-men lament reduced to a greeting card. The saving grace is Joan Allen in the title role. Winner of a Tony Award last year in Burn This, Allen becomes a strong contender to repeat with a performance that displays much the same virtues: an inviting vulnerability, an approach to romance simultaneously fragile and fearless, a wit at once acerbic and diffident. While Wasserstein (Isn't It Romantic?) has written mostly whiny and selfcongratulatory clichés for the surrounding characters, she has given Heidi-or Allen has found—a complex, self-aware and — W.A.H. III poignant life.



Sock hop to sisterhood: Allen, right, and pals

A cartoon version of a generation.



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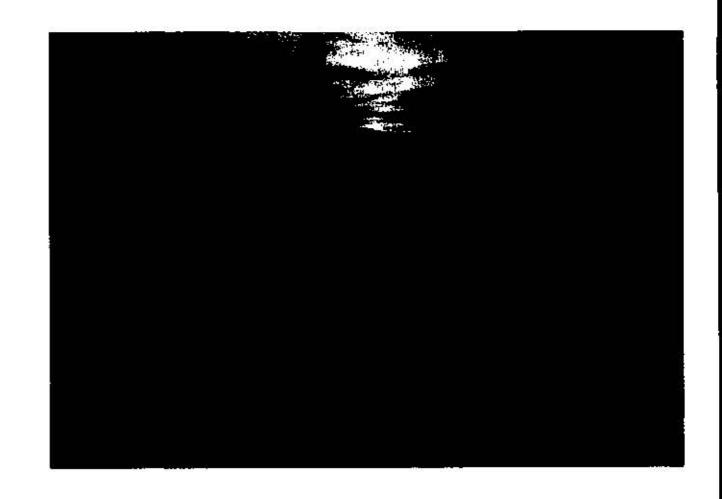
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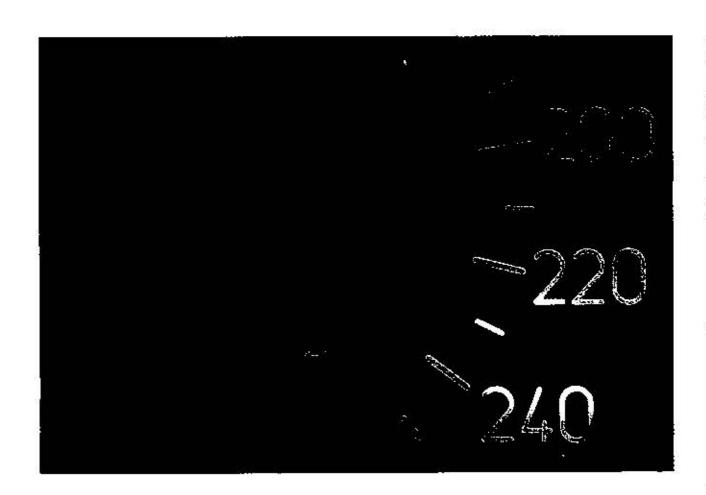
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My Father the Communist

LOYALTIES by Carl Bernstein; Simon & Schuster; 262 pages; \$18.95

BY WALTER ISAACSON

n the 15 years since he helped topple a President, Carl Bernstein has become famous more as a celebrity than as a journalist. He has been pictured on the gossip pages with a procession of notable women. He was portrayed by Dustin Hoffman in All the President's Men, based on the Watergate book he co-authored with Bob Woodward, and, as a fictional character, by Jack Nicholson in Heartburn, based on a cleverly barbed novel by his former wife, Nora Ephron. All the while, he was waging an off-and-on struggle with a project that he described to friends as "an account of the witch-hunts leading up to the McCarthy era."

Now the book is finally out, and it turns out to be far more personal than that. It is a candid and powerful inquiry into his parents, their union activities during the 1940s and their secret membership in the Communist Party. As Bernstein explains to his father, "It's a very personal book. It's not a history book at all." In fact, it is a book about writing a book, a book about Bernstein writing the book that his parents did not want him to write.

A good memoir should produce shocks of recognition that are both intimate and historical. revealing truths about a person and about his times. Bernstein provides both, in abundance, Juxtaposing excerpts from declassified FBI files with tales of a childhood thrown into turmoil by the early postwar Red scares, he has created a new genre—what might be called the investigative memoir. It combines the journalistic thrill of Watergate with the emotional punch of that most basic of literary themes, a boy's search to understand his father.

Bernstein, who was born in 1944, recounts his Washington childhood in a family of politically progressive Jews. Upon returning from the Army at the end of World War II, his father Alfred became active as an organizer for the United Public Workers of America, a left-wing union representing federal employees. After President Truman, in an effort to satisfy political pressures, issued the loyalty order of 1947, the elder

Bernstein's life was dominated by defending public workers summoned before the loyalty boards and accused of being Communists.

Soon his parents' loyalty was questioned. In 1951, in front of a Senate committee. Alfred invoked the Fifth Amendment when asked if he was a member of the Communist Party. His wife Sylvia, also active in progressive causes, did the same three years later in front of the House Un-American Activities Committee. The family found itself shunned by many of its neighbors, friends and even relatives. The FBI kept the Bernsteins under surveillance for years (Bernstein's bar mitzvah is duly described), accumulating 2,500 pages of files that pop up in the book.

Young Bernstein's reaction was to be-

Excerpt

My father was bending over to putt through the windmill when I got this pretty good notion to take a whack at his head with a golf club. It is the only time in my life I consciously remember feeling like that. My sister Laura had just been born. Probably it was Oedipal nonsense. But in my family Marx and Freud get very confused.

come a patriotic rebel-class air-raid warden, supersalesman of Defense Bond stamps, proud wearer of an I LIKE IKE button—and a marginal student who eventually skipped college to become a newspaper copy clerk. He also, quite understandably, became interested in whether his parents had actually been Communists. When he was eight, he first blurted out the question to his father. "I remember the silence that followed and my not daring to look at him," Bernstein writes. "My question offered no escape: there is no Fifth Amendment for eightyear-olds." His father tried to skirt the question, speaking instead about the irrelevance of party membership and the persecution of progressives. "I didn't ask any questions when he finished explaining, and I'm sure he guessed that my silence meant that I knew. It took twenty-five years before I asked him that question again."

The answer, deftly treated, is that both his parents had been, for a short pe-

riod, party members. Therein lies the main source of tension throughout the book: grappling with his father's wish that he not reveal their secret. "You're going to prove McCarthy right, because all he was saying was that the system was loaded with Communists," says his father. "And he was right."

The "loyalties" of the title thus refer to more than just the allegiance Bernstein's parents had to the Communist Party and to their Government. The real struggle in the book is between Carl's loyalty to (and love for) his parents and his search for the truth about their lives. At times his quest becomes traumatic. Bob Woodward makes cameo appearances, comforting his former partner when he breaks into tears at the memory of a childhood schoolmate calling his mother a Communist.

For all his honesty, Bernstein upholds the honor of his parents. They were never subversives, never disloyal to their country, he says. His sensitivity to Alfred and Sylvia (both still living) means that he never quite penetrates the deepest questions: Exactly why did people like them join the Communist Party? Just what did they do at their cell meetings? Was there in fact some danger in having people working for the Government whose loyalty was also to the Communist Party? And, on a more personal level. does he feel he has betrayed the

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By not probing such sensitive spots too deeply, Bernstein may be doing the reader a favor. As it is, the book fairly crackles with emotional intensity and unsettling historical questions. With his rich depiction of his parents and pungent evocation of the period, Bernstein has been able to explore his controversial issues with the finesse of a jazz musician bouncing around themes that might otherwise be too hot to handle.

Long Haul

FIRE DOWN BELOW

by William Golding Farrar, Straus & Giroux 313 pages; \$17.95

BY PAUL GRAY

he 19th century hero of this seafaring novel finally completes a laborious journey from England to New South Wales. In transit, Edmund Talbot grows weary of "this seemingly endless voyage"; safely ashore at Sydney Cove, he marvels that he has been at sea for nearly a year. In fact, the trip has taken much longer than that. William Golding first shoved Talbot off dry land in Rites of Passage (1980), which went on to win the Booker Prize, Britain's most coveted award for fiction. After receiving the Nobel Prize for Literature in 1983, the author got back to Talbot's story in Close Quarters (1987). Fire Down Below completes Talbot's memoirs and provides a glimpse of the older man who wrote them. He has evidently done well for himself: "Only the other day the Prime Minister himself said, 'Talbot, you're becoming a deuced bore about that voyage of yours."

That is too harsh, although this final leg sometimes displays the enervation of a long haul. When last seen. Talbot was in a severely damaged and leaky old warship. Now the weather turns ornery. Talbot mentions this to his new friend, the ship's first lieutenant Charles Summers, and receives a scary response: "You have seen nothing yet, Edmund. There is something at the back of this wind."

But sea changes are only half the story. Talbot himself continues to undergo mutations. He is no longer the haughty young gentleman, secure in the protection of an influential godfather, who set out to take his place on the staff of the Governor of Australia. Talbot has become aware of suffering—his own and that of his fellow passengers, the crew and the poor emigrants huddled "forrard" in the heaving ship.

His prejudices are further unsettled by his growing interest in Aloysius Prettiman, a figure of caricature in the earlier books but now a man, seriously ill, who attracts Talbot's sympathy. Prettiman, a



Golding: denying an itch to allegorize

political radical, and his new wife are transporting a printing press with which they hope to stir change in the convict colony. Talbot reprimands stiffly: "And you, sir, travelling with the avowed intention of making trouble—of troubling this Antipodean society which is created wholly for its own betterment!" Yet the young Englishman could become dry tinder for Prettiman's incendiary rhetoric: "Imagine our caravan, we, a fire down below here—sparks of the Absolute—matching the fire up there—out there!"

albot is not the only entity who might go up in smoke. There is a fire down below in the ship as well; red-hot iron bars have been inserted into the huge block of wood that supports the wobbling foremast in the hope that the constriction of cooling metal will stabilize the structure, allowing for more sails and greater speed. A sluggish progress suddenly becomes a race against time.

Landfall should provide a relief and a letdown, but Golding has saved a number of surprises for his bittersweet conclusion. Among them: Talbot's sense of bereavement at being freed from all the people with whom he was cooped up on board. He pays a call on the Prettimans and finds the wife stern. "In fact," she lectures him, "you should not be here at all." When Talbot tries to reminisce about the voyage, she stops him: "Do not refine upon its nature. As I told you, it was not an Odyssey. It is no type, emblem, metaphor of the human condition. It is, or rather it was, what it was. A series of events."

That small speech may be Golding's sly response to complaints, dating back to Lord of the Flies (1954), about his itch to allegorize. If so, Mrs. Prettiman deserves a hearing but not total assent. For the Talbot trilogy is both a stirring, sequential narrative and an image of humanity adrift in tides and time. The adventures have ended, but their shapes remain.

Fatal Schism

FATHER AND SON

by Peter Maas Simon & Schuster; 316 pages; \$18.95

The Guinness Book of World Records does not have to look further than the sponsor's backyard to find a candidate for the oldest struggle for independence. One character in Peter Maas' richly layered novel of Paddys and Provos says the Irish have been going at it since the 12th century. Tragedies tend to turn into romances over that length of time. Rough madness is temporized by art.

Or at least good craft. Maas, who has skillfully dovetailed law-and-disorder in best sellers like Serpico and The Valachi Papers, proves adept at joining history to melodrama and to convincing plot twists with slightly implausible characterizations. A middle-aged New York City adman named McGuire turns into a modified James Bond to investigate the disappearance of a headstrong son, a Harvard student who has been mixed up with running



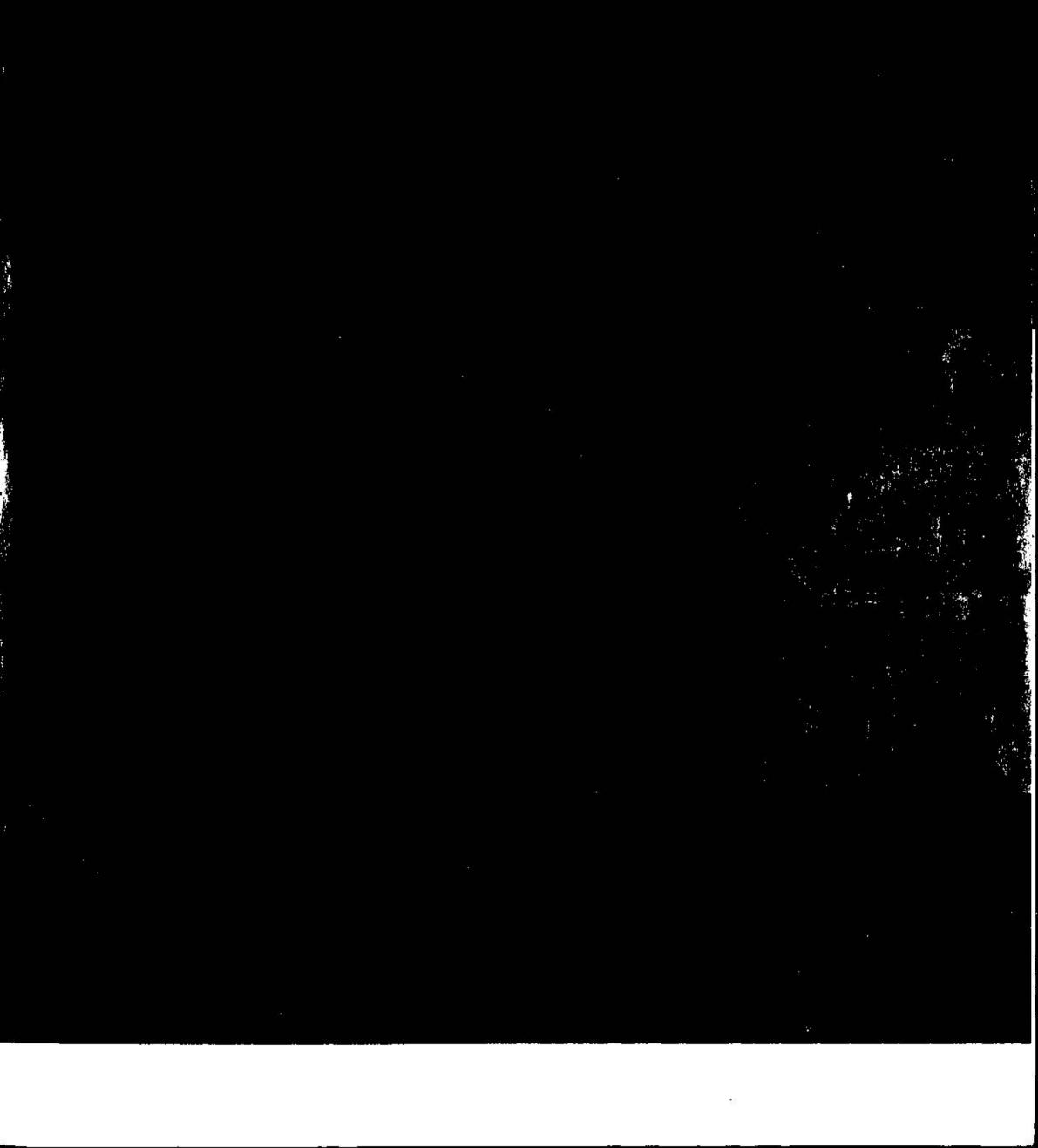
Maas: boyos

guns to the I.R.A. McGuire's metamorphosis may strain credulity, but his motives are authentically rooted in strong parental emotions.

These play well against the political passions of terrorists in Northern Ireland and their Irish-American supporters. Fanatical hatred

tends to homogenize characters while removing their interesting elements. Their actions, however are hard to ignore. A daring raid on a Boston National Guard armory nets the boyos a cache of M-16s. 40-mm grenade launchers, heavy machine guns and a wardrobe of flak jackets. Getting this arsenal to Belfast involves the cooperation of members of Boston's Irish underground and I.R.A. sympathizers in the U.S. Customs Department.

The heroic adman learns that his son was set up to preserve the effectiveness of a British-run mole in the I.R.A. Maas cuts a clear line between his sympathy for the Irish cause and his aversion to cold-blooded violence. There is ice, too, in the veins of Britain's counterterrorists, and hypocrisy in the Republic of Ireland, whose constitution includes all of the Emerald Isle in its national territory. As one insider puts it. "It was an open secret that given its domestic economic woes, the last thing the republic's leadership wanted was to take on the burden of the six northern counties." This is a good story well told, with verve, pathos and unavoidable -By R.Z. Sheppard complexity.



Scene Beijing

A Collector's Fondest Dream

Wang Shixiang preserves his priceless ancient furniture

BY JAIME A. FLORCRUZ

Beijing lane lurks a dingy courtyard, a remnant of the Ming dynasty (1368-1644). Inside, in a four-room apartment, lives Wang Shixiang, 74, China's foremost antique-furniture collector. "Don't take off your coat," the silver-haired scholar says, as he ushers in a visitor. "We have

no central heating. Everything is so humble here, so primitive."

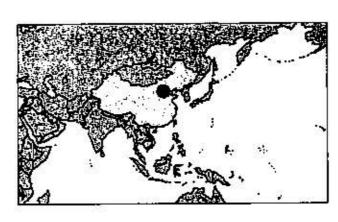
Primitive perhaps, but also exquisite. Wang's modest abode is a virtual museum. He sleeps in an early Qing-dynasty (1644-1911) bed, sits on a 15th century hardwood armchair and writes on a 17th century painting table. Four Qing zithers hang on the walls, and an iron-cast bust of a bodhisattva, a "barbarian" Liao-dynasty (907-1125) relic, gazes across a studio that is cluttered with manuscripts, ink brushes, books and plants.

"Wang is the only man in the world who uses a blueand-white Ming jar as an iron-tongs holder," quips Lark E. Mason Jr., a close acquaintance and assistant vice president of Sotheby's, the international art auction house. Wang excels at painting, cal-

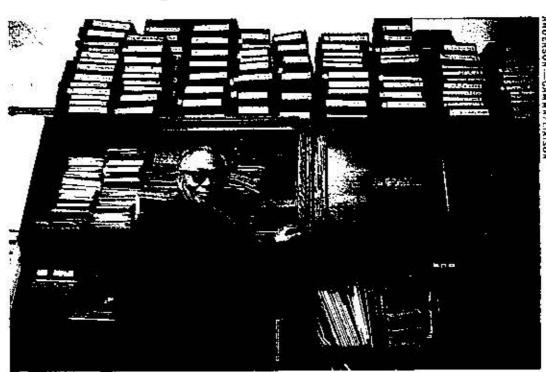
ligraphy and music. He has written books and treatises on lacquer, bamboo carving, cooking, even the tiny wooden whistles that are attached to pigeons' wings to make curious sounds.

Every morning these days he works with Mason, a specialist in antique Chinese furniture, on a sequel to Wang's Classic Chinese Furniture (1985), the first important work on the subject to be written in Chinese. Says Mason: "His collection is one of the few that have remained intact in China. Wang himself typifies the collector-scholar of an earlier time."

Wang was born in Beijing to an eru-



dite and affluent family. His father was a diplomat, his mother an artist who was well known for her paintings of goldfish. Wang spent much of his childhood engaged in the pastimes of China's well-to-do of the 1920s: falconry, badger hunting, pigeon raising. He attended the American School in Beijing and the missionary-run Yanjing University, where he learned fluent English. "We had servants and a gar-



The collector in his library: trying to make up for lost time

"I retrieved more than 1,000 items of jewelry, gold, paintings and porcelains from . . . Henry Puyi's mansion."

den," he recalls of his childhood, "and so I felt like a king."

During World War II, Wang fled to Sichuan province, where he worked for two years with a noted architect and developed an interest in Chinese woodwork. After Japan's surrender in 1945, he joined a government team assigned to recover cultural relics looted by the Japanese. "I worked very hard and retrieved more than 1,000 items of jewelry, gold, paintings and porcelains from four safes in [the deposed Emperor] Henry Puyi's Tianjin mansion," Wang says. "We sent them all to the Palace Museum."

Wang has devoted 40 years to building his private collection of more than 100
pieces spanning the period between early
Ming and Qing. Among his treasures: a
Qing sugarcane squeezer, a Qing benchshaped wooden pillow and a Ming washbasin stand with towel rack. Mere possession of such a collection proved to be
politically disastrous in the early 1950s,
when Wang was branded the "biggest relics looter" by Communist zealots. In 1953
he was expelled from his position as curator of antiquities at the Palace Museum.
He was jailed for ten months and was not
allowed to return to his old job until 1962.

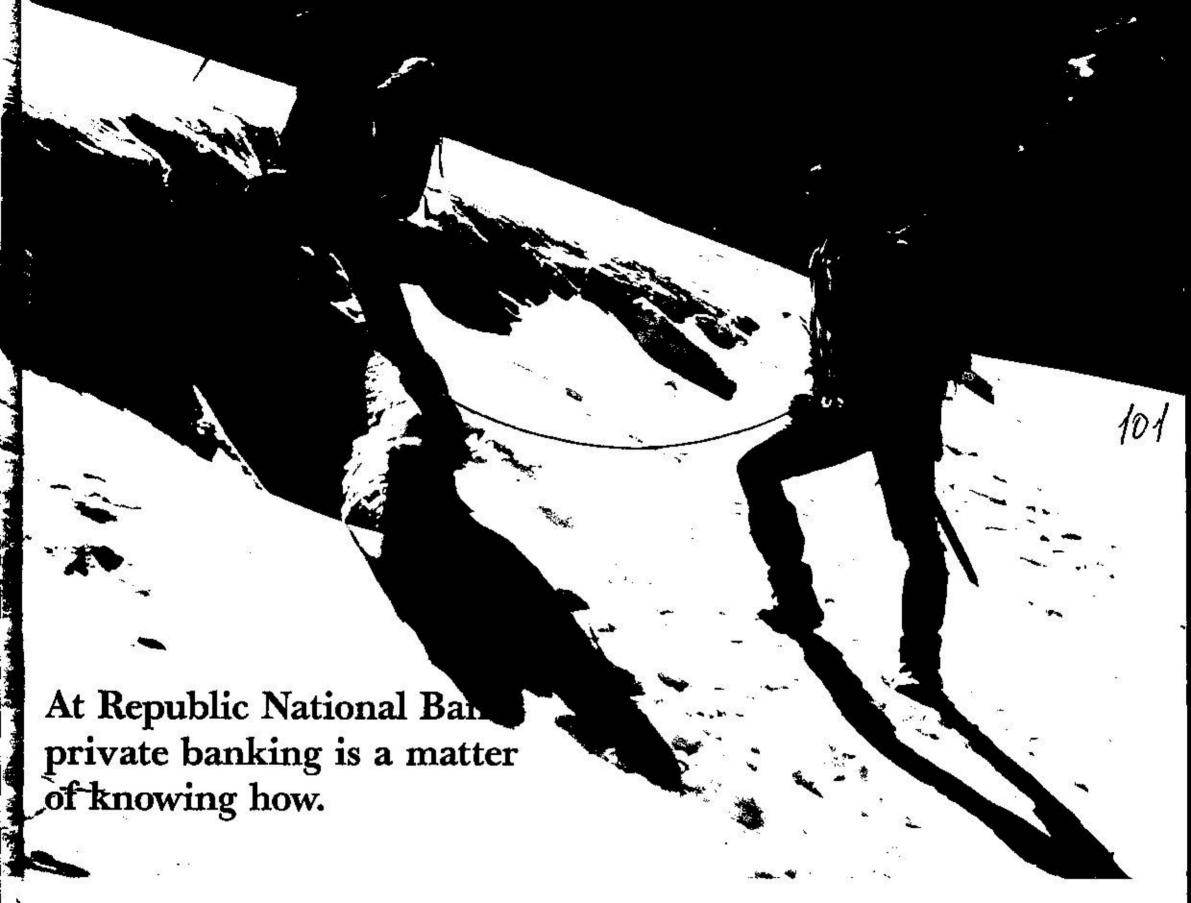
Seven years later, the Cultural Revolution caught up with Wang and his wife Yuan Quanyou, a music historian. They were banished to the countryside to undergo "ideological remolding through la-

bor." Only as the intensity of Mao Zedong's great upheaval began to wane in 1973 did the government permit them to return to Beijing. Once again Wang went back to his former position at the Palace Museum but was not able to work freely until 1979. "Since then, the authorities have left us alone," he says, "so we've spent every minute trying to make up for lost time."

It is no small miracle that Wang's collection survived the mindless destruction of the Cultural Revolution. As it happened, Wang may have prevented the ransacking of his precious artworks by surrendering them to a Red Guard faction within his own bureau. Says he: "The collection was padlocked inside the Confucian Temple in Beijing and was returned to me in batches in the late '70s. I got

back 99% of it intact."

Wang still uses many of his priceless antiques in his daily life; others are spread helter-skelter throughout the apartment. "I have no storage space, so I have to keep them here," he explains. More than anything else, he dreams of establishing a small museum that would preserve and exhibit the collection, but he knows that his ambition may never be realized. "Furniture is still of little importance in Chinese culture," he laments. "It's not at the top of the officials' priority list; in fact, it's not on the list at all."



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осуществлении реформ Горбачева.

С тех пор, как в декабре 1985 года Ворис Ельцин из

Свердловска на Урале (58 лет, крупного сложения и высокого почти 190 см - роста) был выдвинут Михаилом Горбачевым в состав

Политбюро, никто из советских политических деятелей не
высказывался столь непочтительно о советском образе жизни и
никто не прилагал таких усилий, чтобы его изменить. Получив
назначение в Московскую партийную организацию с целью очистить
ее от коррупции, он вскоре выгнал сотни бюрократов и объехал
весь город, выступая с речами, критикуя недостатки в снабжении
продовольствием и общую некомпетентность. Но его реформаторское
рвение и жесткие споры с консервативным членом Политбюро Егором
Лигачевым привели к его публичному осуждению и снятию с поста в
Московской партийной организации в ноябре 1987 года.

Но Ельцин отказался уйти с политической арены. Пониженный в должности и низведенный до уровня заместители министра в строительной промышленности, он ныне пытается совершить нечто неслыханное в советской истории — политическое возрождение. Пользуясь широкой популярностью в Москве, Ельцин добился избрания его одним из двух кандидатов на предстоящих 26 марта общенациональных выборах участников съезда народных депутатов. Ныне он проводит активныю предвыборную кампанию, разъезжая по городу, набирая новых сторонников и вызывая приветственные крики толпы. Он прервал сту гонку, чтобы дать в своем московском

кабинете интервью вашингтонскому корреспонденту журнала "Тайн" Дэвиду Эйкману.

Вопрос: Вы проводите предвыборную кампанию в Московском округе так, словно от этого зависит Ваша жизнь. Почему победа на выборах так много для Вас значит?

Ответ: Моя кандидатура была выставлена несколькими сотнями организаций из 50 различных избирательных округов Советского Союза. Но Московский округ есть Московский округ. Избранному депутату будет легче решать иногие проблемы, если он избран именно от этого избирательного округа, округа N 1 в Москве.

Кроме того, во время драматических событий осени 1987 года меня обвиняли в том, что москвичи меня не принимают. Я думаю, что теперь есть объективная возможность проверить, правда ли это.

- В.: Почему это так для Вас важно?
- О.: Почему? Если Вас ударили на улице и отняли у Вас пиджак, Вам тоже было бы небезразлично, пойман ли грабитель.
- В.: Если Вас изберут в депутаты от Москвы, какой, по Вашему мнению, будет Ваша роль?
- О.: Одно дело, если я стану просто участником съезда, и совсем другое, если я стану постоянным членом Верховного Совета, вроде профессионального политического деятеля, если пользоваться Вашим словарем, хотя у нас и нет такой терминологии. В последнем случае мои функции будут иными и рассматривать их надо иначе. Что же касается того, чтобы стать членом Верховного Совета, я не думаю, что мои шансы очень велики.
 - В.: Почему так?
 - О.: Как мне кажется, те, кто выдвигает предложения, не

испытывают особого энтузиазма на этот счет.

- В.: Кто, например?
- О.: Политическое руководство.
- В.: Почему политическое руководство настроено против Вас?
- О.: Нельзя назвать это именно так. Я полностью поддерживаю основные направления перестройки, внешнюю политику страны и т.д. Но у меня есть свое мнение по вопросам политической тактики, которое несколько отличается от позиции официального руководства. В этой связи в наших отношениях существует некоторая напряженность, но я подчеркиваю, что она ограниченная.
- В.: Должен ли Президент СССР избираться общин прямым голосованием?
- О.: Я думаю, должен. Это мое мнение. Я полагаю, что выборы должны быть всеобщими, равными, прямыми и при тайном голосовании, выбирать следует из альтернативных кандидатов снизу доверху, включая выборы Председателя Президиума Верховного Совета СССР.
- В.: Не хотели бы Вы выставить свою кандидатуру на этот пост?
- О.: Я не альтернативный кандидат Горбачеву. Я принимаю Горбачева как лидера.
 - В.: А что было бы, если бы Горбачева не было?
 - О.: К чему это обсуждать? Горбачев есть.
- В.: Вы однажды заявили, что существует "мафия", которая пыталась помешать проведению Ваших реформ, когда Вы были первым секретарем Московского комитета партии. Как она действовала?
- О.: Я думаю, что у вас, американцев, влолне достаточно опыта в этой области и вы знакомы с ее методами лучше, чем я. Мафия в СССР далеко не такая сильная и влиятельная, как в

- Америке. У нашей мафии нет и такого опыта, как у вашей.
- В.: Какие у Вас разногласия с Горбачевым по вопросам политики?
- О.: По вопросам внешней политики их нет. Но есть по некоторым проблемам внутренней политики. Официальная точка зрения такова, что перестройка должна двигаться вперед по всем направлениям, что она должна охватить все. Я же считаю, что у нас недостаточно возможностей и ресурсов для этого. Мы недостаточно зрелы. Мы еще не прошли через психологическую перестройку в плане демократизации общества. Поэтону нам следует двигаться вперед поэтапно. Я предпочитаю такой подход. Первый этап дает какой-то результат, затем следующий этап приносит еще какой-то результат, и так создается цепь перестройки. Конечно, одним из первых звеньев этой цепи должна быть политическая система. Начав с этого, мы затем должны повысить уровень жизни, сконцентрировав на этом наши ресурсы, даже если это будет означать уменьшение капиталовложений, инвестиций и расходов в других сферах. Это для того, чтобы народ поверил в перестройку. Психологически мы, конечно, стали жить несколько лучше. И в этом заключается перестройка. Но двигаясь вперед сразу по всем направлениям, как мы это делаем уже в течение трех с половиной лет, мы, с точки эрения жизненного уровня, едва ли добились yenexos.
 - В.: Возможно, стало даже хуже?
 - О.: Возможно, в некоторых районах и стало. Зависит от района.
- В.: Почему советская экономика оказалась в таком тяжелом положении?
- О.: Это слишком общий вопрос. Вероятно потому, что мы не выполнили лозунгов, провозглашенных нами в 1917 году: "Власть -

Советам", "Земля — крестьянам", "Заводы — рабочим", "Хлеб — голодным". Авторитарное руководство и, следовательно, недостаток демократии привели к определенной апатии народа, к своего рода социальному нигилизму, скептицизму. Ко всему этому следует прибавить ошибки культа личности. Это только одна часть проблемы.

Помимо этого мы постоянно выступали с критикой конкуренции и рыночного механизма в Вашей стране и дошли в этом до того, что само слово "рынок" было исключено в нашей стране из обсуждений. Рынок может быть капиталистическим или социалистическим, но это все тот же рынок. Здесь мы потратили впустую много времени, не говоря уже о том, что было принесено в жертву, о людях и ресурсах, которые мы потеряли. Помимо этого, система уравниловки в зарплатах привела к потере заинтересованности рабочих и руководителей в работе. Например, кто-то ставит рекорд, перевыполняет норму в пять раз. Ему бы надо повысить зарплату в пять раз, но вместо этого немедленно появляется тенденция платить ему не в пять раз больше, но только в три: "Вот тебе, чтоб не стремился разбогатеть!"

- В.: Есть ли какие-нибудь черты русского характера, которые мешают прогрессу страны?
- О.: Я считаю, что проблемы возникают из-за условий, которые не дают русскому характеру проявиться. Русский характер не слабее американского. У нас тоже есть люди с деловыми способностями, но, конечно же, в плане предпринимательства многие у вас быстрее добиваются успеха, благодаря самой системе предпринимательства. Мы же только в последние годы начали говорить о социалистической предприимчивости, считая, что это может быть выходом и для нас. "Давайте, говорим мы, двигайтесь и

думайе быстрее, и вы получите больше доходов от вашего предприятия".

- В.: Одним из ваших основных противников в Политбюро стал Егор Лигачев, председатель комиссии по сельскому хозяйству. Что он для Вас означает?
- оппонент.
 - В.: В чем равница?
- О.: С противником дерутся на дузли или как-то иначе сводят счеты, например, военной силой. Лигачев же мой оппонент. Просто у нас разные точки зрения, разные мнения по некоторым вопросам тактики. Ну, конечно, я думаю, что он более консервативен, если не сказать совершенно консервативен, говоря простыми словами. И повтому я считаю, что это осложняет процесс перестройки. За ним, однако, стоят определенные силы. Их трудно определить, они не организованы; нельзя сказать, это Иванов или Петров. Но они существуют. Не в таком количестве, чтобы составить оппозицию Горбачеву, но это замедляющий фактор.
 - В.: Как же Лигачев замедляет процесс перестройки?
- О.: Скрытно. Если я выдвигаю предложение, он выдвигает противоположную точку зрения. В плане социальной справедливости, он считает, у нас нет проблем. Я же считаю, что проблемы есть, и они продолжают держать общество в состоянии напряженности в моральном плане. Если убрать эту напряженность, ростки перестройки начнут расти.
 - В.: Что Вы думаете о многопартийной системе?
- О.: Это трудный вопрос. Мы еще не сняли замки со всех дверей, многие двери вообще опечатаны. По моему мнению, этот вопрос должен быть открыт для обсуждения. Это будет первым шагом.

Сегодня мы еще не готовы. Я хочу сказать, что мы сегодня не готовы к тому, чтобы завтра принять решение по этому вопросу.

- В.: Вы выступали против привилегий для партийных Функционеров. Но не пользуетесь ли этими привилегиями Вы сами?
- О.: Я был назначен заместителем министра и перемещем с девятого этажа этого здания на четвертый. Через день ко мне является некто и предлагает мне воспользоваться привилегиями, спецпайками. Я даже не позволил ему войти в мой кабинет. Я сказал ему: "Я вас не виню. Я понимаю, почему вас ко мне послали, но у меня есть принципы. Я против таких вещей. Больше ко мне не приходите".

Конечно, я не отказался от всех привилегий, если говорить откровенно. Одно дело отказаться от спецпайка, от доступа в специальные магазины и от других услуг. Но я не отказался от персональной машины, от дачи, небольшого деревянного домика, расположенного в районе, где проживают и другие министры, от специальной службы здравоохранения. Из других министров моему примеру не последовал никто.

- В.: Какие внутренние побуждения движут Вами, когда Вы имеете дело с подобными вопросами?
- О.: Это может показаться тривиальным, но я действительно хочу, чтобы у нас было государство социальной справедливости. Действительно. И я хочу за это бороться.
- В.: Это не тривиально. У Вас с детства была эта убежденность?
- О.: Да, конечно, но не такая сильная, как теперь. Это чувство обострялось с течением времени, по мере того, как я больше узнавал, сталкивался с огромной разницей в уровнях жизни. Поэтому я такой горячий сторонник социальной справедливости. Это

необходимо для создания нормального морально-психологического климата в обществе. Для этого не нужно специальных мер. Но нужно, чтобы определенные категории людей кое-чем пожертвовали. Мы должны жертвовать собой. Я не считаю это лозунгом. Общественные интересы выше личных интересов. Через месяц меня, может быть, выберут для участия в съезде народных депутатов и, таким образом, я перестану быть министром. Сегодня я не знаю, где я найду работу. Но меня это не заботит. В Вашей стране в этом смысле легче. Политический деятель может иметь собственную ферму, какой-то капитал, фабрику. И он не боится оставить все это на какое-то время и даже потерять все это, если его изберут в Сенат или в Палату представителей. Он может поработать там некоторое время, а затем вернуться к своей собственности. Он чувствует себя в безопасности. У меня же нет и рубля сбережений.

В.: Было ли в Вашей жизни какое-то событие, которое заставило Вас пойти по нынешнему пути?

О.: В моей жизни были драматические события. Например, однажды я решил без колейки в кармане объехать Советский Союз, просто чтобы посмотреть страну. Это было в 1952 году. В течение трех летних месяцев я путешествовал и наблюдал. Одно дело путешествовать с чековой книжкой в кармане. И совсем другое иметь в кармане лишь студенческий билет Уральского политехнического института. Это меня многому научило. И то, что я ездил без билета на крыше вагона, и то, что я ночевал где попало вместе с бездомными и бедными. Так я и путешествовал, хотя кажется невозможным представить такое.

Как я зарабатывал на питание? Подрабатывал то там, то здесь. Например, разгружал уголь. Или готовил одного армейского полковника к вступительным экзаменам по математике. Он мне

неплохо заплатил. Позднее я в течение 10 лет жил в бараке. Это сарай со сквозным коридором и комнатами по обе стороны от него. Там было 20 комнат, и в каждой жило по пять человек, не говоря уже от козах, которые спали рядом с нами. Когда кто-то заводил патефон в угловой комнате (эдесь Ельцин перебивает себя и цитирует слова старой песни времен гражданской войны), весь барак начинал подпевать. То есть в моей жизни были самые разнообразные впечатления, включая и необычные. Я уж не говорю о том, что я пять лет играл в составе лучшей волейбольной команды Свердловска. Я и сейчас занимаюсь спортом, но нынче я играю в теннис.

- В.: Вы хорошо играете?
- О.: Не могу сказать, что хорошо. Мне уже не 20 лет. Но с Вами я бы сыграл.

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