#### **COMMUNICATIONS REVOLUTION**

# Will no birds sing in the wired city?

BY SHARON AIRHART Special to The Globe and Mail

Pick one: Thanks to new technology. A. we will become grotesque half-machine cyberbeings, wired to the world but without

human contact. B. we will have repaired the worst mistakes of the Industrial Revolution, putting good health, peace and global economic equality

within our grasp. C. I plan to retire before anything else changes

This is not a test of what you know but how you feel. Much like the authors of six recent books on the future impact of new technology, chances are, your view of the future is informed as much by your belief system as the facts at hand.

The Death of Distance, by Frances Cairncross, is like an episode of Star Trek, The Next Generation. We see before us an orderly, rational world. Common sense prevails and, no matter what the challenge, things mostly turn out right for the individual and, therefore, for the collective.

It's a compelling and plausible view of the near and farther future, enhanced by an engaging history of how we got from Alexander Graham Bell to Bill Gates. Best, it is presented in the clear, spare style of The Economist, where Cairncross is a senior editor.

Subtitled "How the Communications Revolution Will Change Our Lives," The Death of Distance brings us big ideas in simple words. Foremost among these is the notion that the "death of distance" as a determinant of communications cost will be the single most important force shaping society in the first half of the next century. Add to that the astonishing ways in which computers and communications are combined, and we begin to understand, in the 1995 words of AT&T chairman Robert Allen, that something "startling, intriguing and profound is afoot.'

Why that is the case when the three "revolutionary" communications technologies, the telephone, the television and the electronic computer, have been around for 110, 70 and 50 years respectively, is explained by recent advances: for telephones, fibre-optic cables and mobility; for television, satellites and digital transmission; for computers, networking and exponential growth in computing power.

In Cairncross's "Trendspotter's Guide," we get the shorthand version of 30 important changes these revolutionary technologies can create. Among them are "profitless prosperity": It will be easier to find buyers but hard to make fat margins. Reading and writing skills will improve as E-mail induces young people to express themselves effectively in writing. Economic interdependence among countries will lead to more understanding of other parts of the globe. "The effect will be to increase understanding, foster tolerance, and

ultimately promote worldwide peace." All told, "at the heart of the communications revolution lies something that will, in the main, benefit humanity: global diffusion of knowledge." As a result, Cairncross says, poor countries will have access to information once restricted to the industrialized world, electorates will be more informed, it will be easier to start businesses, more people will work at home and small companies will offer services that previously only giants could provide.

The computer and its many cousins may produce a life for us that is 'profoundly democratic and liberating,' one in which the imbalance between large and small, rich and poor is levelled.

Or are we looking at a time when people become 'citizen-terminals,' decked to the eyeballs with interactive devices and taking their pallid joys in virtual reality.

erating, levelling the imbalance between large and small, rich and poor. The death of distance, overall, should be welcomed and en-

By contrast, Paul Virilio would have us mourn. In Open Sky, the French media theorist quotes René Char: "Eliminating distance

Virilio's challenging text paints a dark picture of the future. He tells us that one day, the day will come when the day will not come. He tells us that information technologies are urbanizing time the way railways and automobiles urbanized space. He asks us to consider how we can live if there is no more here and if everything is now.

Not a book for the faint-hearted, Open Sky could be a worthy challenge for those who want to think about the deeper meaning of light on a screen, of going to work in your pajamas or of being titillated by made-up dinosaurs not really eating people in a blockbuster movie.

That is not to make light of the impact of these technologies, which are, as every book reviewed here reminds us, profound. For Virilio, technological change presents the spectre of the "citizen-terminal," soon to be decked out to the eyeballs with interactive devices. He believes the information age mutilates us all, replacing our real body with the prosthetics of computers and virtual reality.

Observing the probable landscape of the future, Cairncross finds us happier, healthier and freer; Virilio looks out and sees only that we are in danger of losing our humanity.

In considering this divide, the obvious must be said. The way you and I perceive and experience the communications revolution is a function of how we experience the world. The lens through which we observe technological change has been ground from our political point of view, our knowledge and our assumptions. The fact that Virilio sees damage where Cairncross sees promise says more about who they are than about the technol-

So, too, Cutting Edge, a collection of articles edited by Jim Davis, Thomas Hirschl and Michael Stack. It opens with a quote from Karl Marx and proceeds from there.

Canadians will be interested in Sally Lerner's clear-eved if ideologically driven essay, "How Will North America Work in the Twenty-First Century?" Lerner, who is on the faculty of the University of Waterloo and moderates the FutureWork discussion list on the Internet, reminds us that "the ongoing technological revolution, gaining in speed and scope with every decade, will affect the vast majority of North Americans at the very centre of their lives - their jobs."

Unlike Cairncross, Lerner shows us "unpleasant scenarios of the future," where we find an ever-growing "working poor" class, automated out of skilled and middle-manage ment jobs into "lower-paying, non-union jobs in the fast-food, tourism or nursing home sector." This downward mobility, she says, will "In all these ways, the communications create long-term unemployment leading to nications revolution with qualified enthusirevolution is profoundly democratic and lib-poverty, eroded self-esteem, family break-

THE DEATH OF DISTANCE How the Communications Revolution Will Change Our Lives

**By Frances Cairneross** 

Harvard Business School Press, 320 pages, \$24.95

**OPEN SKY By Paul Virilio** 

Verso, 144 pages, \$16 CUTTING EDGE TECHNOLOGY, INFORMATION

CAPITALISM AND SOCIAL REVOLUTION Edited by Jim Davis,

Thomas Hirschl and Michael Stack Verso, 302 pages, \$19

LOST IN CYBERSPACE? Canada and the Information Revolution

By Robert Chodos, Rae Murphy and Eric Hamovitch James Lorimer & Co., 192 pages, \$19.95

> THE SOFT FDGE A Natural History and Future of the Information Revolution

By Paul Levinson

**DEVELOPMENT AND THE INFORMATION AGE** Four Global Scenarios for the Future of Information and Communication Technology

Routledge, 232 pages, \$35

**Edited by John Howkins and Robert Valantin** International Development Research Centre,

59 pages, \$15 down, rising crime rates. On this path lies the resort to "some form of authoritarianism."

Equally thought-provoking are two articles by Tessa Morris-Suzuki, professor of Pacific and Asian history at the Australian National University. Unlike Cairncross, Morris-Suzuki does not predict that the communications revolution will close the gap between the haves and the have-nots. Since perpetual innovation economies depend on sophisticated social structures, including high levels of education, complex corporate networks and strong state systems, Morris-Suzuki believes that developed nations will use their existing advantages to strengthen their dominance over less-developed areas.

In the final article in the book, author Nelson Peery, who has been "active in the communist movement since the 1930s," predicts that, since production without wages inevitably leads to distribution without money, capitalism is dead

An earlier version of that perspective surfaces in an old Walter Reuther story, retold in Lost in Cyberspace? Reuther, long-time president of the United Auto Workers, who died in 1970, was being shown new auto-assembly machinery by Henry Ford. "How are you going to get union dues from these fellas?" Ford asked. "How are you going to sell them

While the authors of Lost in Cyberspace? journalists Robert Chodos, Rae Murphy and Eric Hamovitch — claim to view the commuasm, they turn a jaundiced eye on corpora-

tions and a nervous backward glance at the military ancestry of technologies such as the

"Whatever the new information technologies may promise in the future, their effect so far has largely been to increase insecurity, meanness and fear," they report.

Lost in Cyberspace? is most concerned with the need to bring Canadian public interest "into play" in the communications revolution. They authors advocate, among other measures, the prohibition of vertical integration in the communications industry.

'Cable companies in the United States, often in collaboration with telephone companies and satellite communications systems now merging with giant publishing and production corporations see themselves as one integrated whole." The authors believe these "agglomerations," like Rupert Murdoch's The News Corp. empire, have distinct political agendas in addition to their financial goals.

The content side of the media, including some interesting writing on "radio heads" Churchill, Roosevelt, Hitler and Stalin, is the focus of *The Soft Edge* by Paul Levinson, who teaches communications at Hofstra University in New York.

A self-styled "grand tour of the evolution of media," The Soft Edge is not really about the overall "information revolution." In fact, that term — Cairncross' communications revolution — is often used to describe three areas of economic activity, as Tessa Morris-Suzuki describes. First, through information technology, machines do work. Second, a new industry has been created, concerned with the tools and information to do that work, i.e. software, databases. Third, the creation of 'consumer information" such as books, television, CDs, videos, distance education and home-computer software. Here, the "revolution" is about changing delivery methods (multimedia, interactive, digital) and the way those changes interact with content as well

the explosion in the volume of information. For those with good eyesight, the patience for endless references to earlier works and a taste for rambling discourse, The Soft Edge is a kind of bargain. It probably has more words than any of the other books reviewed here.

as with broadcasting vs. narrowcasting and

One of those words is "digital." Levinson calls the alphabet "the first digital medium." Since it does not comprise or transmit ones and zeroes, the alphabet is not digital. While he acknowledges, some 98 pages later, that the alphabet is only "figuratively" digital, it's too little, too late for those who like their descant served with rigour.

Read instead Development and the Information Age, edited by John Howkins and Robert Valantin. In fewer than 60 pages, this book, published by Canada's International Development Research Centre (and available in its entirety on the IDRC website), explores the impact of the communications revolution on development, the current theme of the United Nations Commission on Science and Technology for Development.

The global community has two value sys-

tems jostling for power. One is inclusive, open and enabling with solid attempts to in tegrate the weak and disadvantaged. The other is exclusive, fractured, restrictive, a Darwinian world, red in tooth and claw, dom inated by the strong and powerful for their own ends, with increasing concentrations of technology, wealth and power and little regard for those left behind.'

The difference is not between private and public interest, but between co-operation and exploitation. We learn that the information and communications industries will "fuel a rollercoaster ride of research, investment, development, acquisition and wealth creation, and that the companies involved are focused aggressive and visionary, and that this drives change more surely than public policy.

The tsunami of innovation is examined in terms of what government policies might do about the result. Four scenarios of possible futures were developed by the commission.

If all goes well globally, the authors decide, "Networld" will emerge. Informed by enlight ened self-interest, companies will create new markets working with developing countries; equity, fair accounting and open access will become the management style. National governments and the private sector will work in tandem more often than not.

In some respects, Networld is the very future Frances Cairneross describes. Whether we get there from here — and in the idiom of Star Trek: The Next Generation, we have also ready "engaged" - or end up in some terrible other place, depends not on the technologies, as Paul Virilio might have us believe, but rather on the way we apply them. We may function in cyberspace, but not much has changed since cave dwellers picked up sticks. Even Sally Lerner's article in Cutting Edge quotes British analyst Colin Gill, who has said there is nothing deterministic in the nature of the new technology itself. We can use the stick to push seeds into the

earth or we can use it to threaten and dominate the guy in the next cave. Either way, you can't blame the stick.

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#### ıΩ **Related Web sites**

ΤĤ The Economist www.economist.com MIT Media Lab www.media.mit.edu ati. **Luddite Purity Test** www.luddites.com/purity.htm JW

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International Research Development Corporation

CTheory

Information Highway Advisory Council

#### **Related Reading**

Release 2.0: A Design for Living in the Digital Age by Esther Dyson (Broadway Books, 1997). Collective Intelligence: Mankind's Emerging World in Cyberspace by Pierre Lévy (Plenum Publishing, 1997)

Cyberwars: Espionage on the Internet by Jean Guisnel (Plenum Publishing, 1997)

## Person, Place, Thing

Person: Terry Mosher (Aislin), editorial cartoonist, Montreal Gazette

Place: Bangkok Paradise Restaurant, Queen Street W., Toronto

Thing: Predictions for 1998

Will Canadians' ongoing honeymoon with Prime Minister Jean Chrétien end in 1998? "Chrétien is much craftier than people think. He will never get dirt on him.

Preston Manning's makeover; what next? "He should give us a break and go back to his old self. The only way he's going to be prime minister is if Quebec separates. He will be cheering for Jacques Parizeau to come back."

What will Canada's First Nations claim in

"An ancient burial site on the grounds of The Globe and Mail."

Mr. Parizeau promised that, for the rest of Canada, Quebec's struggle for separation will be "a never-ending visit to the

dentist." Will the visit continue? "The visit will continue for another 10 to 15 years and eventually peter out. Nothing will be resolved.

How will the Supreme Court of Canada's case on the constitutionality of separation be resolved?

"Fighting for hearts and minds, it is hard to see how a court decision is suddenly going to make people do the right thing. Who cares! It's lawyers! I predict it won't resolve anything in Quebec. But it will become a fine excuse to create resentment and to call an election."

Will Brian Mulroney finally go away? "Wasn't the \$2-million enough?! Clearly he misses the limelight. I don't really want him to go. Cartoonists love to hate him. It's like

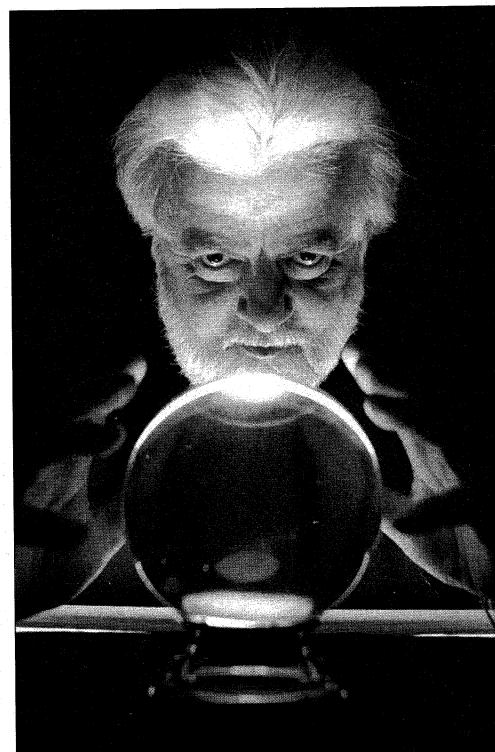
settling into a warm bath: Aaah, he's back." Will Mr. Parizeau go away? "He's never really gone. Parizeau is dear to the hearts of approximately 25 per cent of Quebeckers — hard-core separatists. They'll pine for him. He'll be around longer than

Lucien Bouchard." Who'll be the next Chief of Defence Staff? "Peter Desbarats.

Will O. J. catch the killers? "I wish him luck."

Will the Toronto Maple Leafs win the Stanley Cup? "Not a chance."

BY ANTHONY JENKINS The Globe and Mail



Terry Mosher: Quebec's visits to the separation dentist 'will continue for another 10 to (TIBOR KOLLEY|The Globe and Mail) 15 years and eventually peter out.'

### The Challenge 282

# Jane Eyre Force One and other Hollywood hybrids

BY WARREN CLEMENTS The Globe and Mail Toronto

NE of last November's challenges was to create a merger of two movies and provide a one-line plot synopsis. Here is another double-barrelled batch:

Oh, What a Lovely War of the Worlds: First World War troops are dismayed that in addition to their human enemy they must also battle alien invaders from Mars. (Eric Kosky, North York) How Green Was My Valley of the Dolls: A

promising Welsh student succumbs to the drug temptations of Hollywood. (David McKercher, Toronto) The Odd Couple Like Water for Chocolate:

Separately advised by their physicians, Felix refuses milk with his cocoa while Oscar dives for candy bars. (Joseph Chin, London, Ont.) The Ugly Dachshund Who Framed Roger Rabbit: Kiddy pic about comic villainy in the animal underworld. (B. W. Jackson, Hamil-

Flashdances With Wolves: A Union soldier in a lonely western outpost dreams of making the big time as a dancer. (Miriam Pyett, Sas-

katoon) On the Beach Blanket Bingo: California teens go surfing while awaiting the end of the world. (Al Wilkinson, Barrie)

The Long Goodbye, Mr. Chips: The schoolmaster's wrongful-dismissal action seems to drag on interminably. (Ken Purvis, Toronto) Four Weddings and a Funeral While You Were Sleeping: Grandma dozes off a lot and misses family gatherings. The Red Shoes of the Fisherman: Much to the astonishment of the College of Cardinals, the Pope takes up ballet. (Helen and Peter Marucci, Fergus,

Jane Eyre Force One: The president's insane wife emerges from the cargo hold to hijack his plane. (Paul Davy, Parry Sound,

Bigfootloose: Oh, no! (Shannon Davy, Toronto)

Hook the Little Mermaid: Freshly divorced man finds the answer to midlife crisis on a fishing trip. (Ron Charach, Toronto)

The Neverending Story of "O": Pubescent lad stumbles upon fifties pornography and enters into a perishing fantasy world of eroticism that only he can save. Die Hard Day's

Night: Zealous American anti-terrorist vigilante overestimates the threat of quirky British rock group. (Joan McKenzie, Etobicoke, The Elephant Man Who Would Be King: A

man with grotesquely deformed ears tries to

convince the population of a tiny outpost that he is their ruler; Charles Windsor stars. (Martin Illingworth, Waterloo) Yentl Ben: In 19th-century Europe, a Jewi ish girl raises an orphaned bear cub. (Bent

Gaskell, Hamilton) Born to Be Wild Strawberries: An aging professor on the eve of being given an award runs away and joins a biker gang. (Eric

Mendelsohn, Toronto) Driving Miss Daisy Bananas: No matter how straight the road, she always felt as though she were going round the bend. (M.

Sanderson, Toronto) Grumpy Old Men in Black: Two retired curmudgeons compete for the love of the same woman, save the Earth from gigantic alien in sects and still have time to go fishing. (Chris

Reed and Mary Anne FitzPatrick, Halifax) The Madness of King George of the Jungle: Courtiers are skeptical of the doctor's new swing from the chandeliers" treatments. (Lesley Hands Wilson, Victoria)

Watership Down and Out in Beverly Hills: Bunnies on skid row. (Michael and Sangi Greene, Calgary)

No Way Out of Africa: Danish novelist meets writer's block. (Cherry Watson, Water-

Robocopacabana: Singing android takes over the planet Mah-ni-Loh. (Barrie Collins; Courtenay, B.C.)

Long Day's Journey Into Nightmare on Elm Street: A dysfunctional family is haunted by the evil Freddy Kreuger. (LeAnne Reynolds, Victoria)

This week's challenge: How naive was he (or she)? He was so naive he thought the red-light district meant there were traffic signals at every intersection. She was so naive she thought expensive swimsuits were meant to be worn in the water. Sugs gest other examples.

Entries to: The Globe Challenge, Editorial Dept., The Globe and Mail, 444 Front St. Who Toronto, Ont. M5V 2S9 (fax: 416-585-5085); Deadline: noon (Toronto time), Jan. 13 Prize: The Globe and Mail Style Book.