THE UNESCO COURIER

THE MULTIMEDIA EXPLOSION
QUO VADIS?

...AND AN INTERVIEW WITH **RÉGIS DEBRAY**

The Great Manitou created the sun, the moon and the stars
1994, oil on canvas
(92 x 73 cm)
by Danie Moulin

"My painting is intended as a message of universal love," says French artist Danie Moulin. She uses signs and symbols from different cultures in her work in order to "remind people that others exist and to encourage a sense of humility." This canvas is part of an ensemble that will relate the legend of an American Indian tribe through its own visual language.

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THE MULTIMEDIA EXPLOSION
QUO VADIS?

Cover:
An integrated circuit
provides the background for a
computer-generated image

"The Governments of the States parties to this Constitution on behalf of their peoples declare,
"that since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed ...
"that a peace based exclusively upon the political and economic arrangements of governments would not be a peace which could secure the unanimous, lasting and sincere support of the peoples of the world, and that the peace must therefore be founded, if it is not to fail, upon the intellectual and moral solidarity of mankind.
"For these reasons, the States parties ... are agreed and determined to develop and to increase the means of communication between their peoples and to employ these means for the purposes of mutual understanding and a truer and more perfect knowledge of each other's lives...."
EXTRACT FROM THE PREAMBLE TO THE CONSTITUTION OF UNESCO, LONDON, 16 NOVEMBER 1945

This issue comprises 52 pages and a 4-page insert between
pages 2-3 and 50-51.

Month by month

Should we feel threatened by today's dramatic advances in com-
munication or should we regard them as a source of hope? If many
leading thinkers hold different views on this question or hesitate to
state their position, it is because these advances are ambivalent,
because their present impact and likely future effects imply such
major changes in our ways of living and thinking that we are simul-
taneously fascinated by the new perspectives they offer us and ner-
vous about the unknown, unpredictable aspects of the world they
force us to accept.

This issue of the *Courier* has been prepared to help readers to see
the situation more clearly. It attempts first of all to show that
people's perception of the media and communication explosion
tends to be coloured by where they live—in the West, the East or the
South; by whether they side with the powerful producers of state-
of-the-art technology, who transmit knowledge, information and
entertainment, or with those parts of the world that can only
receive what is sent their way by others. Viewpoints also vary
according to whether one favours freedom of expression or com-
mercial freedom, responsible citizenship or passive consumption,
access to a global culture or the defence of a specific culture.

But after reading the contributions from many backgrounds that
try to come to grips with this issue, it is hard not to return to the
one question that seems to encompass all the others: are advances
in communications restricting and stifling our freedom, or are they
extending and deepening it?

We are inclined to believe that these advances are on the side of
freedom, and even that today's major world challenges are insepa-
rable from the incredible explosion of freedom that has accompanied
the computer and media revolution of the past two decades.

In the East and in the South, new-found freedom has broadened indi-
vidual horizons. It has extended people's opportunities to assess,
compare, judge, choose and take personal initiatives more than it
has consolidated their political and social rights. This is why it
often gives rise to doubt and anxiety; to desires, needs and hopes
that are far greater than the means of satisfying them; to the temp-
tation felt by those left by the wayside to think nostalgically of par-
adise lost, to reject freedom, progress and the rest of the world out
of hand.

Today's world does not measure up to the expectations to which
this new freedom has given rise. But surely there is nothing new in
this. The spirit of freedom always appears first. It challenges privi-
lege and the forces of inertia, changes attitudes, breaks new
ground and opens new horizons, leading to solutions that only a short
time before were thought impossible. The next step is for the world
to adapt and change in order to accommodate the projects that will
spring from the imagination of people who are freer, more responsible
and more united.

BAHGAT ELNADI AND ADEL RIFAAT
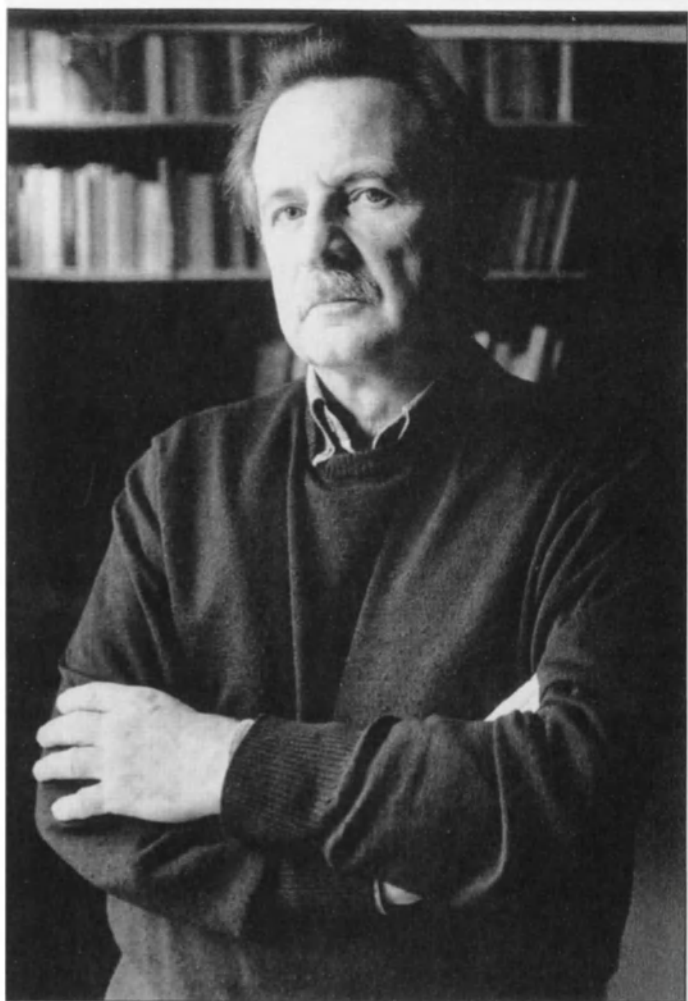
RÉGIS DEBRAY

talks to
Daniel Bougnoux

The French philosopher, essayist and novelist Régis Debray, who was born in 1941, is one of the most brilliant thinkers of his generation. A graduate of the prestigious Ecole Normale Supérieure, in 1967 he joined Che Guevara's guerrilla movement in Latin America, which led to three years' imprisonment in a Bolivian jail. Back in France, he worked on the Committee for Studies on Freedom established by François Mitterrand who, after being elected President of France in 1981, appointed him foreign affairs adviser and later assigned him to a post with special responsibilities for the Third World. Régis Debray's studies of the world of images, carried out over the last ten years, have led to the development of a new discipline called mediology. His main works on this theme are *Cours de médiologie générale* (1991), *Vie et mort de l'image, une histoire du regard en Occident* (1992) and *Manifestes médiologiques* (1994), all published by Gallimard, Paris.

■ **You have proposed a new discipline with a rather enigmatic name—mediology. What exactly is mediology?**

— Mediology is a discipline that is still on the drawing board. It seeks to examine the relationship between the higher social functions (religion, politics, ideology and mental attitudes) and the technical structures used for the transmission of information. It therefore looks further than the media that actually carry information. It is concerned first and foremost with symbolic effectiveness: how do symbols—words, writing and figures—manage to produce specific effects and become material forces in a given society? Communication in the modern sense of the term is a specific, if belated, response to a much more difficult and permanent issue, that of mediation. This is a fundamental notion which has been at the heart of Christian theology. After all, Christ is the archetypal mediator: "And the word was made flesh". The mediological assumption is that it is possible for each period in history—from the neolithic or the invention of writing to the electronic era—to establish verifiable correlations between the symbolic activities of a human group, its forms of political organization and its method of recording, storing and disseminating "traces" (ideograms, letters, characters, sounds and images).

■ **Could you define the field of mediology and its neighbouring areas rather more precisely?**

— The field of mediology? All the interactions between technology and culture, even the most tenuous and minor such as newsprint or radio waves but also transport networks, the organization charts of churches and political parties, and so on. The neighbouring areas of mediology? Semiology, but semiology does not take account of material supports and historical discontinuities and is not interested in power, but only in the meaning of signs. Sociology, which does take account of the environments in which ideas and images are received, but disdains technical events and the impact of all kinds of equipment. Perhaps our closest neighbour is the history of mental attitudes, because a problem cannot be analysed without looking at the period in

> **'Leading journalists, singers and stars have become strong competitors of teachers as poles of authority, and the small screen is becoming a more important centre of learning than the traditional school.'**

which it occurs. Mediology is built up from a multitude of empirical works centring on the materialities of culture.

■ In this context, what is the role of the state?

— The European nation-state is a child of the printed word (without which mass education was inconceivable). In France, the Revolution created a state with a mission to educate, the Republic, based on the ideas of Condorcet. The cult of knowledge and reason, subordination of the individual to the general form of the law, order and progress—all of that presupposed control of images by writing. This system continued to function until around 1968 when it was destroyed by the new video techniques—the videosphere. In the videosphere, the importance of symbolic (written) and institutional (parliament, political parties, trade unions) mediations is diminished, and they are replaced by the emotional immediacy of images and sound. Direct broadcasts take precedence over recordings, the short-term over the long-term; visible personalities dominate invisible policies (which cannot be shown on a screen).

This spells the end of party programmes and official grand designs. The media state is programmed by the broadcasting machine, to whose ideology it subscribes. Inherent in this ideology are the atomization of the social body into categories to the detriment of the general interest; the worship of majorities and consensus; the elevation of usage to a norm (since the principal social use of the written word is newspaper reading, let us teach schoolchildren to read newspapers); the need to fabricate events and create sensations. Privatization of the state is accompanied by market-oriented government: the customer is king; government follows the vagaries of social demand. The logic of demand overturns the logic of supply. Each ministry is guided by its "communicators".

■ Do these new technologies threaten or enrich education today? How are our memory and knowledge evolving in the era of multi-channel TV, home computers, CD-ROM and data banks?

— Leading journalists, singers and stars have become strong competitors of teachers as poles of authority, and the small screen is becoming a more important centre of learning than the traditional school. This is a very serious trend because knowledge cannot be reduced to knowing facts. Knowledge is more than mere information; culture bears within it the memory of meaning, it is more than today's news blotting out recollection of the past. The message recorded in a text has more content than a live broadcast of images and sounds.

So it would be wrong to suppose that an image culture can dispense with the need for the rigours of discursive and abstract thinking. At heart it presupposes their existence. An aerial photograph will be meaningless to an observer who does not have some experience of archaeology. Unless we teach children to read at least a little, we cannot teach them to see. If we place the broadcasting of messages above the training of the human mind, we are putting the cart before the horse.

The problem is that a basic course in musical notation brings less credit to a government leader today than the inauguration of a new music festival which will receive wide press coverage. But the former is more essential to the development of musical culture than the latter. It seems to me that the traditional library of books is the best path towards the video library, whereas the reverse is not the case. Those who replace history lessons by showing historical films on video cassettes in the classroom are merely helping to bring supply and demand a little further into line in the cultural sphere.

Having said that, the real problem, or rather its pedagogical solution, is the computer. The computer should be capable of enhancing the role of distance education at university level, of providing continuing education for adults and of offering greater equality of access to knowledge.

■ What about the idea of the global village, of which so much has been made since McLuhan?

— The missing dimension of the McLuhan-style global village is what I would call the "jogging effect". With the invention of the motor vehicle, the futurologists of 1910 said that town-dwellers stuck in their little box on wheels would soon be unable to use their legs. But when urban man stopped walking, he began to run instead. As the objects of our planet become increasingly globalized, so its subjects are more and more tribalized. Each step forward towards the economic unification of the world is accompanied, through a process of compensation, by a step backwards in the cultural and political spheres. Technology does of course oblige us to standardize the media and so also to some extent the messages carried by them. But the differences in mental outlooks and memory rise up in opposition to that trend. Each imbalance created by a new form of technical progress is accompanied by a reshaping of the ethnic balance. Hence the confusion between the process of European unification and a phenomenon of Balkanization, between the progress of science and the advance of superstition, between economic imperatives and territorial aspirations.

Our village, which is both increasingly global and narrow-mindedly patriotic—the one because of the other—lives in an age of nationalism, separatism, irredentism and tribalism, the dark faces of which are called
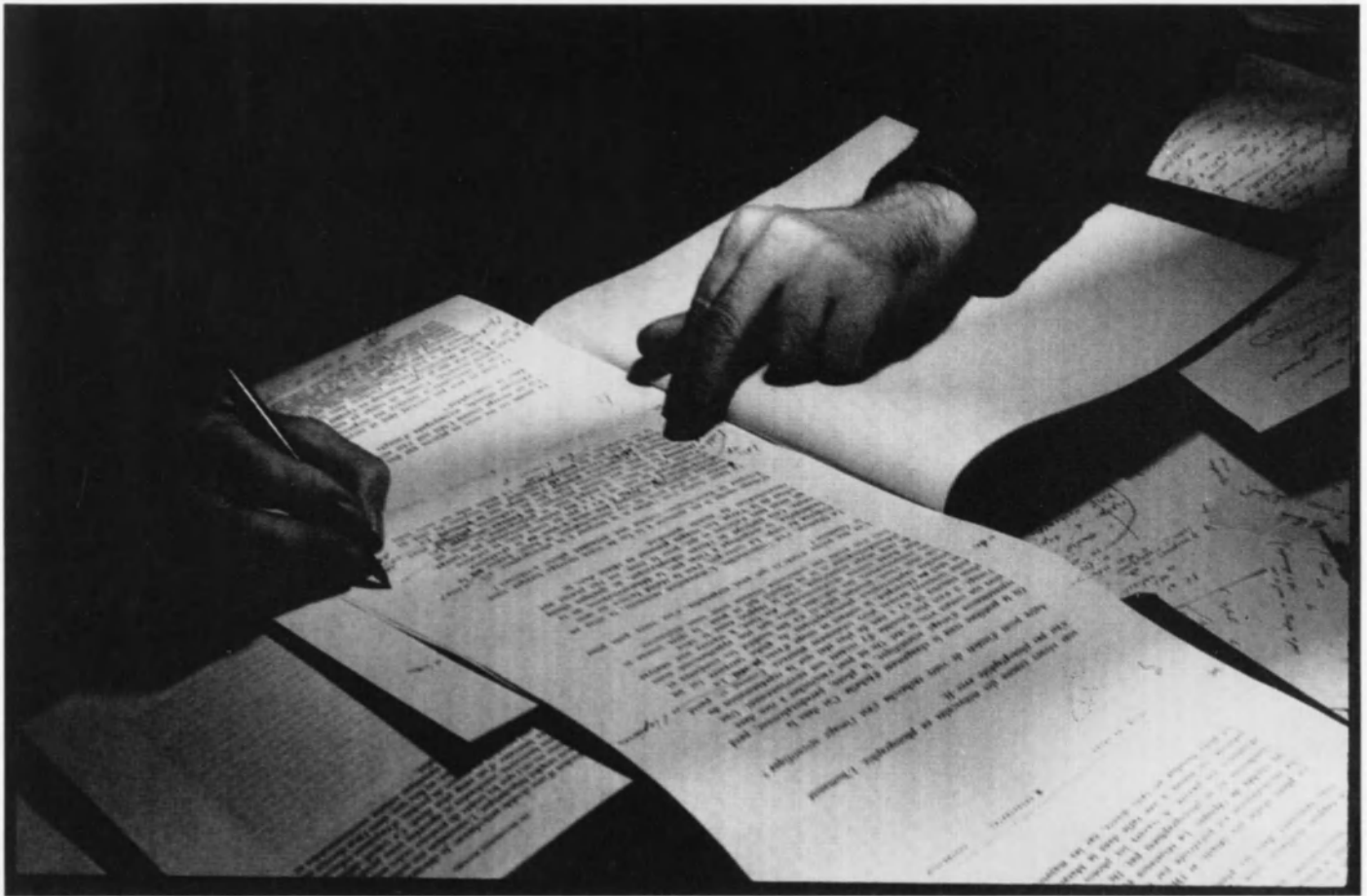
segregation, war and xenophobia. The centrifugal forces which are threatening to fragment the great multinational states do not spare the centralized countries of Europe with their very old "civilizations".

■ **What do you feel about what has been called "the cultural exception", the idea that cultural products should be given some form of special protection from globalized free trade?**

—The purpose of the cultural exception is to prevent the Spanish, Brazilian, Argentine, Canadian, Indian and other cinemas from being relegated to a ghetto, turned into folklore and confined to a small local market of 10 per cent—the sop given by the imperial power to the cause of fringe entertainment. The survival of the people without a voice and without images is at stake here, whatever their language may be.

> **'The traditional library of books is the best path towards the video library, whereas the reverse is not the case.'**

The real question is this: are we entitled today to allow several different visions of the world to circulate or just one? And if we do want more than one, are we prepared to make the necessary resources available with public aid for production, a redistribution of profits and broadcasting quotas?

Edison once said that "whoever controls the cinema industry will control the most powerful means of influencing the people." Today, he would have to say: all peoples. The image governs our dreams and dreams govern our actions. Political hegemony always presupposes the destruction of different outlooks. The cultural proletarization of three-quarters of all mankind is liable to give rise in the twenty-first century to even more resolute and numerous rebels than the economic proletarians of the nineteenth century. Is the whole planet to be converted into a supermarket where the peoples will have no choice between the local ayatollah and Coca-Cola? Natives versus yuppies: this is a split that exists in all countries. Let us heed the warning and see to it that the soul of the minority cultures, drowned under the waves of uniform images and sounds and deprived of any outlet for self-expression, does not look for a way out in the worst forms of indigenist or fundamentalist regression. ■

'New ways of being together'

by Daniel Bougnoux

Communicating means sharing and establishing relationships. This being so, the extraordinary growth of the contemporary media, which is being accompanied by a transformation of cultures, identities and modes of exercising power and authority, is leading to the invention of new ways of being together.

The history of civilization is intertwined with the history of the gradual departure from rural areas that had been occupied for thousands of years, with the dematerialization of the instruments and products of human work, with the promotion and rapid distribution of signs (foremost among them being currency), with growing desacralization and increasing mobility as part of the phenomenon of urbanization. The peasantry no longer gives society its

direction; culture has ceased to be synonymous with agriculture.

Communication, modernization and rationalization advance hand in hand. By destroying the rural base of society (by the year 2000, one half of the world's population will be living in cities), the modernization that began in Europe in the late Middle Ages has taken people away from the fields and brought them into the orbit of historical time. According to Max Weber, historical time is fashioned by three great "machines": the market economy; activities which require calculation and analysis (technoscience); and the bureaucratic nation-state.

This threefold opening may also be experienced as a loss of roots. Admittedly it has enabled contemporary individualism to blossom, but only at the cost of a radical revision of old forms of identity. People no longer live on stable ground. With the onset or progress of

communication technologies, we are witnessing a transition:

- *from the vertical to the horizontal*: the media which open up the world are irresistibly eroding the old transcendent values. Hence the advance of secularism; but after the Church, education and the state are experiencing the same levelling process;
- *from stock to flows*: in banking, in companies and in the knowledge-based economy, wealth is now measured less in terms of fixed capital assets than by the capacity of operators to mobilize those assets and bring them into circulation; currency itself has become increasingly abstract and impalpable;
- *from content to relationships*: it is no longer enough for a product to be good; it must also find a buyer. On the market, the value of an object is governed by its appearance; it is not substance or content that count but attraction or visibility. The public relations imperative extends to all who take part in public life—politicians, show business or cultural stars, to wherever "what you are is what you are seen to be";
- *from heteronymy to autonomy*: people who are called upon to express themselves and be themselves without fear or favour are ideal participants in this slow process of detachment and analysis.

But this utopia of modern times cannot keep its promises. People do not receive their identity from themselves but from a place, a family or some other symbolic upstream factor. People are territorial beings who have everything to fear from a culture which has lost contact with the soil or is exposed to the onslaught of unbridled communication.

Are we heading for cultural standardization?

The more a message circulates, the more it is liable to lose its particular savour or information content. Thus the new imagery of communication which has become a world of its own can engender an indifferent and superficial cosmopolitan subculture, whose emblem might be the smiling face of Mickey Mouse. When we sit in front of our television sets and play with the globe as Chaplin did in *The Great Dictator*, we get an overview of the life and death of others that cannot be called knowledge. All television viewers know something about Bosnia and Rwanda, but that awareness does little to change the course of history. In this case the communication window merely engenders a feeling of powerlessness and shame.

New fears are also emerging. Who will benefit from the information superhighways of the

"The history of civilization is intertwined with urbanization. The peasantry no longer gives society its direction".
Opposite, New York City.
Below, Berber village women in the High Atlas, Morocco.

'The peasant's field of olden times has been replaced by the page, and ploughing has given way to a thousand different forms of writing, to hardware and software and computer screens which multiply our impressions and memories to an extraordinary degree.'

"**W**hen we sit in front of our TV sets . . . we get an overview of the life and death of others that cannot be called knowledge." Below, a British television crew in a Rwandan refugee camp in Zaire.

future? How can we be sure that globalization, or the "global village" of which we have heard so much, will not amount to Americanization? How can we safeguard our own identity or cultural "exception"?

While the waning of the idea of territoriality may suit a few modern people who are fully committed to nomadic cosmopolitanism, for most it is frustrating their sense of identity in many ways. Whereas people have traditionally been "placed" by their jobs and their housing, the modern world will increasingly require them to change their occupation and place of residence in the course of their lives to adjust to a rapidly changing world. Hence a sense of meaninglessness and confusion. Faced with growing mobility which inevitably spells the end of old forms of solidarity and creates exclusion, an immense need for identity is being expressed through the come-back of religion, of charismatic father-figures and "populist" politicians who promise tangible identifications and warm organic relations.

However, it is by no means certain that the modern media manufacture homogeneity. The German philosopher Theodor Adorno saw them as an instrument for the standardization of culture; but the very notion of mass turns out here to be misleading or otiose, and mass communications, like mass consumption, tend on the contrary to become ramified and individual-

ized, revealing what is specific, occasional or distinctive.

Finally, at world level, it seems that the mosaic of races, cultures, beliefs and histories is far more opaque than the superficial imagery of "communication" would have us believe. Surely the best way to have something to communicate is to acquire a deeper familiarity with one's own culture.

Transmitting to unpredictable receivers

We must take care not to extrapolate from the relative standardization of transmission and conclude that the effects, or the messages that viewers receive (and process) in their own worlds, are themselves uniform. The standardization of mass communications may be a worldwide phenomenon, but the fact remains that we do not know how people watch and we cannot foresee what they will remember.

Identity is neither a thing nor a deposit that can be manipulated or exchanged at will, but an active system of relationships and representations. Each individual lives in his or her "own world", entrenched behind a filter that may be compared to an immunological barrier. That is why the transmission of information is not a linear process but circular (with feedback to the transmitter and/or coproduction of the message by the receiver) and haphazard.

We moderns have no vertical roots in the soil; nor are we confined to a particular piece of territory. Our roots spread out horizontally; they follow the network of signs and knowledge that we are capable of processing. The peasant's field of olden times has been replaced by the page, and ploughing has given way to a thousand different forms of writing, to hardware and software and computer screens which multiply our impressions and memories to an extraordinary degree.

The extension of these new machines therefore announces the end of *the* (single, panoramic) world. Under the onslaught of diversity, our reality is receding or breaking up, to be replaced by a plurality of worlds. Everywhere the communication of signs is outstripping the production of goods and services, and from their coloured cloth each one of us cuts a Harlequin suit which prefigures new norms of knowledge, new frontiers and affinities, new ways of being together and being onself. ■

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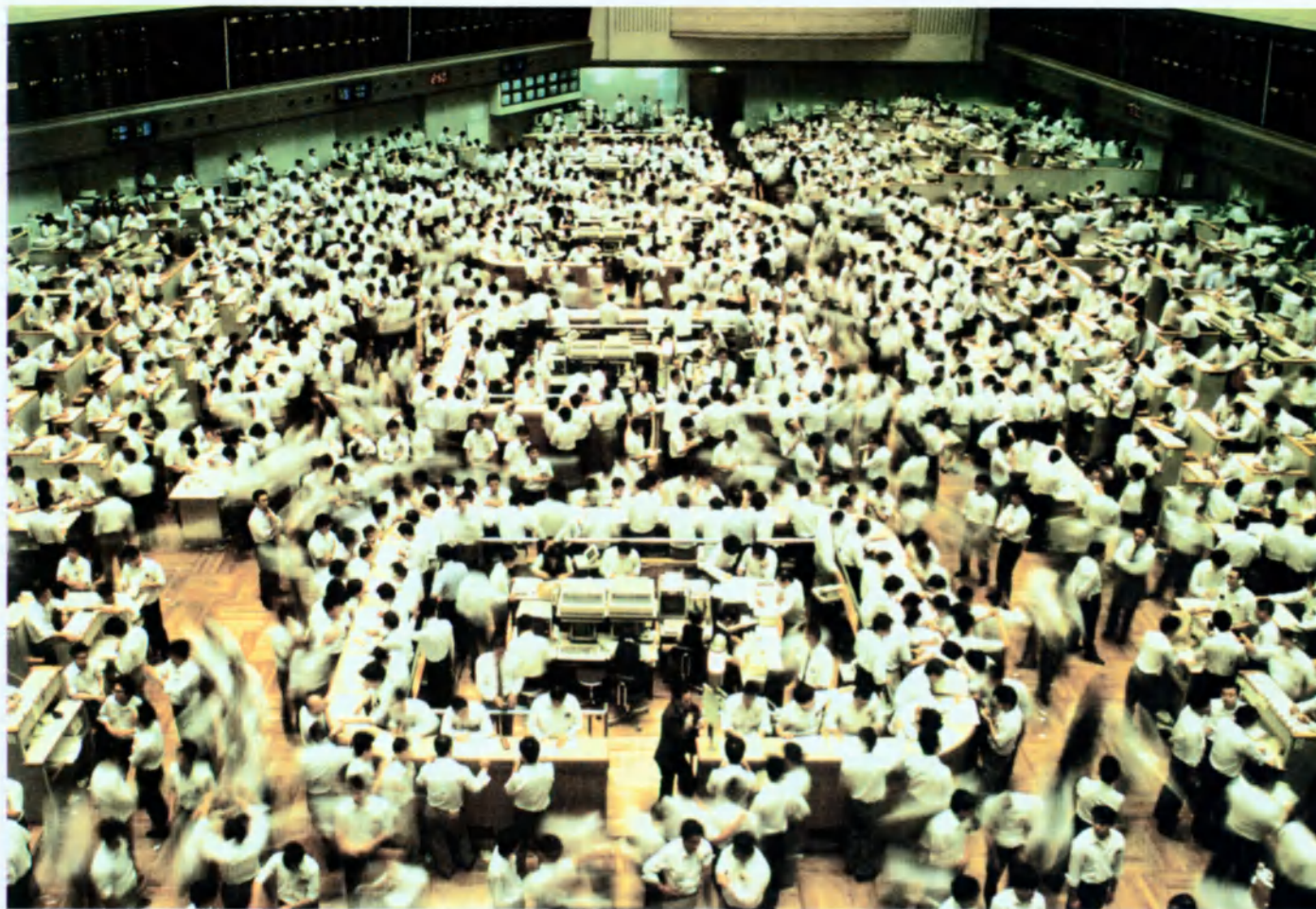
Unequal voices

by Armand Mattelart

Globalization of markets and exchanges is creating new disparities between nations and may lead to a two-speed communication system as well as a two-speed economy.

Above,
the Tokyo stock exchange.

Communication (not only through the media, but also in the sense of exchanges and the free movement of persons, goods and messages of all kinds) has become a form of world organization. Confronted with the bankruptcy of the old ideology of continuous, linear progress, communication has now taken over. It has become the yardstick by which the evolution of humankind is judged at a time when people have lost their bearings and are searching desperately for the meaning of their future.

The English term "globalization" is often used to describe this phase in the international growth of exchanges through the development of communications. Globalization has already become a reality: increasingly, our societies are linked up by information and communication networks whose logic consists in operating in a universal mode. But it is also an over-simplifying notion—a ready-made ideological approach which conceals, instead of revealing, the complexity of this new world order.

Although the idea of the "global village" was first mooted in the late 1960s by the Canadian university professor Marshall McLuhan[1], this view of our planet did not gain a firm foothold until the 1980s, which witnessed the globalization of markets, financial circuits, companies and all kinds of intangible exchanges. This trend was made possible by a wave of deregulation and privatization which turned the market into the regulating factor of society. This in turn resulted firstly in the weakening of social forces, the decline of the welfare state and of the public service philosophy and, secondly, in the growing power of the corporation, its values and private interests.

In the wake of this change, which encouraged the deployment of technological networks and big multimedia groups, the nature and status of communication itself changed: it became

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'Freedom of expression now has a competitor in the shape of freedom of commercial expression, which some wish to elevate into a new human right. This creates an ongoing tension between the empirical law of the market and the rule of law, between the sovereignty of the consumer and that of the citizen.'

increasingly professional and its areas of responsibility and activities proliferated. As to its methods, which were presented as models for the management of social relations, they finished up by penetrating the whole of society. Today, state institutions, intergovernmental organizations, local and regional authorities, and even such varied humanitarian associations as Médecins Sans Frontières, Greenpeace and Amnesty International have no hesitation in using public relations expertise to establish closer links with the general public.

From globalization to glocalization

The idea of globalization is therefore the stock-in-trade of marketing and management experts. In a sense it is the key to their world-view and the foundation of the incipient new world order. They see in it the demise of early-twentieth-century scientific management techniques because the hierarchy of authority and the specialization of tasks created by those techniques corresponded to a structure of the world that no longer exists. In those days the local, national and international levels were seen as a succession of compartments which were impervious to each other. The new view of businesses and the world in which they function as a "network"

establishes an association between these three different levels. Any business strategy on the globalized market must be at one and the same time international and local; Japanese managers use the English neologism "glocalize" to denote this phenomenon. This new corporate logic is governed by the keyword of integration: integration of geographical scales, but also of design, production and marketing or even of spheres of activity which were previously separate. This word does of course evoke a holistic or perhaps cybernetic vision of the organization of the world into great economic units.

The widespread acceptance of the concept of globalization in the strategic thinking of entrepreneurs has changed the rules of the international game, to say nothing of the course of negotiations embarked upon in the sphere of communication networks.

A first conceptual shift has taken place in the very definition of freedom of expression, which has now found a competitor in the shape of "freedom of commercial expression"; attempts are being made to elevate the latter into a new human right. This creates an ongoing tension between the empirical law of the market and the rule of law, between the sovereignty of the consumer and that of the citizen. Organizations of communication professionals saw this as a justification and legitimization of their lobbying campaigns in favour of "television without frontiers" in the second half of the 1980s.

As a principle for the organization of the world, the concept of the freedom of commercial expression is indissociable from the old principle of the "free flow of information" which was invented at the start of the Cold War and has always come to terms with the unequal distrib-

In Delhi (India), a group of young people use stereoscopes to look at 3-D images.

ution of information flows. The managerial doctrine of the corporate undertaking has made this principle popular once again; it equates freedom to engage in trade with freedom as such.

Another shift, this time geographical, has occurred in the assumptions underlying the debate on the subject of communication. In the 1970s and until the early 1980s, UNESCO was one of the main platforms chosen by the movement of non-aligned nations to launch the idea of a "new world information and communication order". Since 1985, however, studies of this subject have been entrusted to a more technical agency, i.e. GATT (the General Agreement on Tariffs and Trade). Communication is treated here on the same footing as services and includes the products of the cultural industries, together with telecommunications, tourism and management techniques.

A special case for culture

The recent GATT negotiations were the setting for a direct confrontation between the European Union and the United States on the subject of the "cultural exception". This confrontation ended on 13 December 1993 in the outright exclusion of audiovisual and cultural productions from the scope of the free trade agreements. On that occasion, the gulf could be seen to widen between the defenders of cultural identity and the proponents of the intransigent application of the criterion of "goods" to every form of production.

During the debate on the liberalization of services, the latter advanced arguments of a populist kind. To justify their opposition to the clause excluding cultural products from the agreements, they put forward ideas of the following kind: "Let people watch whatever they like. Leave them to make their own judgment. Trust in their common sense. The only judgment of a cultural product must be its success or failure on the market."

This argument is not entirely negative in that it recognizes that the user plays an active role, whereas the determinist theories of the 1960s and 1970s simply put him on the receiving end of the communication machine. However, by restoring the consumer's own discernment and stressing his freedom to decide for himself, the problem of the inequality of exchanges on the world market for cultural products, and that of the need to protect the diversity of cultures through appropriate national and regional policies, are sidelined.

Should the freedom granted to televiewers reduce them to wholesale consumption of the

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In a shop window in Allahabad (India) Shiva, the Vedic god of fire, is used as an advertising ploy for electric torches.
Below right, hot-air balloons bearing advertising slogans lift off from the grounds of a French château.

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products of a hegemonic industry, or should they on the contrary be helped to discover the products of other cultures, starting with their own? If we are not careful, the one-sided glorification of the consumer will lead to legitimization of the subordination of certain peoples and cultures. Until the late 1970s, this process was known as "cultural imperialism" and ethnologists continue to describe it as "ethnocide". Unfortunately, when these matters are discussed, there is often a slender margin between narrow-minded chauvinism and defence of the right of each culture to preserve its own access and specific contribution to universal culture.

Creolized cultures

It is disturbing to note the extent to which the concepts inherent in the idea of globalization are now taken for granted in any description of the process of internationalization of cultural and economic exchanges which is under way today. If we are to do justice to the complexity of the phenomena observed, it is imperative to define a new conceptual framework.

I believe that it is preferable to regard the current phase as that of the emergence of "world-communication", a notion which explicitly refers back to the idea of "world-economy" forged by the historian Fernand Braudel to describe the impact of macro-economic flows on the evolution of national economies. As happened during the gradual construction of the economic world, progress towards a planetary "world-communication" system is creating new disparities between countries, regions and social groups. It is giving rise to new forms of exclusion. By relegating a part of mankind to its periphery, it is liable to drag our planet into a two-speed economic and communication system. In future, we may have a world structured around a small number of megalopolises situated for the most

The 1980s saw a quest for a global culture but also the comeback of individual cultures.

part in the North, but in some cases in the South, from which all the principal flows of information and communication radiate out and to which they return. Globalization is not incompatible with increasing disparities. These are two sides of the same coin.

While the 1980s saw a quest for a levelling global culture on the part of the great transnational corporations in search of "universals" which were capable of facilitating the penetration of their products onto the world market, they were also a time when individual cultures made a comeback. The tensions and disparities between the plurality of cultures and the centrifugal forces of commercial cosmopolitanism revealed the complexity of reactions to the emergence of a single worldwide market.

Today, greater attention is being paid to the way in which each culture and each community receives and adapts the messages carried on the world communication networks. How do the negotiations between the specific and the universal, between the national and the international elements take place? Can individual cultures survive? Can they adapt? Or will they go under? These new approaches have enabled the terms "Americanization" and "dependence" to be replaced by others such as "hybridization" and "Creolization".

This new interest in fragmentation and interactions may prove ambivalent. It obliges us to reflect on the process of globalization of exchanges and on its relationship with everyday democracy. But it can also cohabit readily with nationalist and even chauvinist attitudes. A lucid and critical observation of the former without falling into the trap of the latter—such is the challenge that awaits us on the eve of the twenty-first century. ∎

1 In *War and Peace in the Global Village* (1968), a work written jointly with Quentin Fiore.

The media: a modern scapegoat? by Eduardo Valverde

Many people were shocked when the 1991 Gulf War was turned into a world media event; they complained that by turning the conflict into a giant video game, communications had exceeded its mandate. They forgot that the media have never been neutral and that, like war, they heighten and make visible our most diverse and contradictory thoughts and actions.

And yet when I ask my students in Brazil what effect the Gulf War had on them, they seem surprised, as if that war were not a part of their personal experience. Perhaps, like their parents before them, they believe that the notion of experience encompasses only what happens near to home. All the same they are forced to admit that media events have an impact, however slight, on their daily lives and, even though they may be unaware of it, inevitably influence their ways of acting and thinking.

The modern media are frightening because they are—correctly—thought to be capable of influencing people's judgment. Modern communication calls into question the autonomy and freedom of the individual, the great myth of our time. But is this really new? People's judgment and the way in which they perceive their experience have always been determined by the group to which they belong. With the globalization of communications,

however, this phenomenon has taken on exceptional scope. In addition to the modes of perception inherited from the "ancestral homeland" come others which are shared by people all over the world.

The modern media make us aware of the limits of human freedom and of the relative nature of the reality in which we have always been immersed.

Misplaced fears

Theorists of communication are also afraid of the media, often because they make a methodological error. Using ideas applied to exchanges between individuals, they can only envisage exchange within the framework of a single linguistic unit. Looked at in this way the global communications media seem like an immense sound and visual backdrop that destroys dialogue and replaces it with a monologue that is listened to passively.

By using criteria of another age to assess the modern media, these thinkers forget that the media can have a civilizing effect and can create a new balance in today's ways of seeing, talking and acting.

To exist is to transcend one's condition. And the human condition today includes the media world whose existence we must accept.

Standing beneath an open-air screen in Rio de Janeiro, Brazilian soccer fans watch a World Cup match transmitted live from the United States in 1994.

Let us take the soccer World Cup as an example of the huge media events that international sporting competitions have now become. The 1994 World Cup was organized and orchestrated by the United States, where it was followed with a certain indifference. In Brazil, however, a country which was simply a receiver of the media coverage, it generated tremendous enthusiasm. The intensity was greater in Brazil than in the United States, where the sport is not part of the national consciousness.

We must stop being afraid of losing our identity. We must understand that modern communication is flexible and that its messages and images can be made ours just as easily as our parents appropriated those offered by television and the cinema, and earlier, by the theatre, music, poetry and painting. ∎

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Interactivity—
a matter of give and take by Michel Sénécal

A democratic communication system is inconceivable without fair exchange, plurality of viewpoints, direct contact between transmitters and receivers, decentralization and respect for privacy and freedom of expression.

With each new wave of development in media technology, hopes are raised that communication in society will be rendered more democratic. Unscrupulous operators invariably step forth to promote technical equipment that they claim will lead directly to fundamental social change. The word *interactive* crops up

Right, a bundle of optical fibres, glass filaments that are increasingly being used for long-distance transmission of information in the form of computer data, voice messages and video.

again and again whenever businessmen and politicians talk about the electronic information superhighways of the future. Such metaphors propagate a new technical and cultural myth, that of a "communication society" on a global scale.

Readiness to label all kinds of media technology as "interactive"—without the term ever being precisely defined—suggests that the word is being used less to describe these technologies than to make them commercially attractive. However, there is not necessarily any correlation between the degree of interactivity possessed by a piece of technical equipment and the level of democracy attained by the media. When a system is described as "universal, bidirectional and interactive", we should ask ourselves *who* is going to use it and *with* whom, and *what* will be communicated?

Moreover, the fact that a system is universal does not necessarily mean that it is interactive. It may enable the suppliers of a service to deliver directly to subscribers the information and goods they ask for, but it does not mean that the system's promoters have equipped it with the technical facilities (interface, bandwidth, etc.) for communication between users. In cable distribution interactivity has so far been limited to a new way of choosing goods and services, but one in which the vertical exchange of data received and transmitted has remained inegalitarian.

If a communication system is to be used democratically, it must meet a number of other conditions as well as being interactive. These conditions are: immediate and complete reciprocity in all exchanges; plurality of viewpoints; the establishment of direct relations between partners free both to transmit and receive messages; decentralization of information circuits; respect for freedom of expression and for privacy.

A challenge to civil society

New technical developments must be appraised critically, taking into account the needs, interests and values of users.

Regardless of the technological background of any communications project, what matters most is its *accessibility*. Only this can make multiple exchanges possible, placing each user, as often as he or she so wishes, in the position of a supplier of information to the network.

No communication system can be considered genuinely democratic if it causes exclusion, either because of its inaccessibility or because of the images of society it creates. If its architecture is closed and vertical, it may operate

Above, a computer exhibition in Paris.

exclusively to the benefit of a few authorized suppliers.

Will the coming "information superhighways" simply renew existing methods of delivery and distribution of goods of all kinds: catalogue retail sales, pay-per-view, electronic entertainment, banking services, video games, lotteries and so on? The new networks—such as teleshopping via cable TV—will resemble electronic home distribution centres over which absolute control will be exercised by certain private interests. Here interactivity will be limited to sophisticated systems of *selectivity*, allowing choices to be made among a number of pre-programmed commercial options.

But it is also possible that information highways could provide the general public with access to genuine information networks of the kind that are already being offered by the Internet. Combined with decentralized communication mechanisms, interactivity would then encourage conversational-type reciprocal exchanges. The roles of transmitter and receiver would become interchangeable, allowing a very

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An Afghan journalist being trained in Peshawar, Pakistan.

which European radio and television stations were "liberalized", particularly in France and Italy in the late 1970s, leading to the creation of private audiovisual companies. The challenge to state monopolies by social movements mobilized to remove communication from the thrall of the authorities and of market forces resulted, paradoxically, in the commercialization of the media via privatization.

Two opposing concepts

Thus there are tensions between two opposing concepts of interactivity—*selectivity* and *reciprocity*—reflecting two different views of the democratization of the media. In one, viewers are a captive audience in a commercial environment provided to them on a turnkey basis, in which the idea of interactivity remains frozen at a purely instrumental stage, entirely oriented towards consumption. The other calls for a critical reappropriation of the media based on plurality and reciprocity of exchanges as well as greater participation in the decision-making process by those who are at the receiving end of the communication process.

The predominance of the view focusing on the technical and customer aspects of communication is certainly linked to a specific concept of democracy, subject to the logic of the market and clearly oriented towards reduced public-sector services. Interactive technologies will thus continue to lend themselves to social participation in name only unless citizens mobilize in support of a more accessible and egalitarian form of media democratization. ∎

wide diversity of viewpoints to be expressed. This socio-political definition of interactivity is based on a participatory, egalitarian view of communication, one that would offer all individuals and social groups who are excluded from the dominant models presented by the media the means to compose and broadcast messages that correspond to their real communication needs.

The Internet is the product of a hybridization process. Originally designed for military use, then for institutional use, it finally underwent a certain process of socialization to become what it is today. Unfortunately, it is already being eyed covetously by financial interests, and virtual shopping malls are appearing on it. This development calls to mind the period during

At this home shopping centre in the United States, 2,000 operators can take 20,000 calls a minute.

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JOURNEY INTO CYBERSPACE
by Denise Pelissier

People all over the world are taking their first steps on the information superhighway by joining the Internet. Chatting about science, sport or politics with someone on the other side of the globe; consulting the catalogue of the Library of Congress in Washington; admiring the masterpieces in Florence's Uffizi Gallery; delving into UNESCO's data base in Paris—these are just a few of the myriad possibilities open to Internet users.

✔ WHAT IS IT?

It has become virtually impossible to open a newspaper, a news-magazine or a professional journal without finding something about the Internet. This super-telematic network, the world's largest, is being seen as a phenomenon unequalled since the invention of the printing press and a revolution in the production, circulation and exchange of information. It consists of more than 13,000 interconnected computer networks, and the number of its users (high-school and university students, researchers, engineers), already estimated to be some 30 million in 150 countries, is increasing every day.

Forerunner of the "information superhighways" of the twenty-first century, to use the expression coined during the American presidential campaign of 1992 by vice-presidential candidate Al Gore, the Internet was set up in the United States in the 1960s. Originally intended only to link up a few computers belonging to research centres and universities working on a defence project, the network is today growing at the rate of 20 per cent per month, and its management is completely decentralized. Internet is not owned by anyone. Each network pays for the installation and operating costs as well as its being connected up to the other networks.

In short the Internet is both an electronic village and an international campus where all information is gradually organized into an immense virtual library. It is also a gigantic test bench for developing open networks covering the entire planet.

✔ WHAT ARE ITS USES?

First of all it is used for communicating via electronic mail (e-mail). This abolishes the notion of distance. Users from the world over can chat back and forth or take part in roundtable discussions at low cost. For example, high-school students in San Diego (U.S.A.) send and receive letters from students in a school in Israel. During the attempted coup d'état in Russia in August 1991, RELCOM, a small network linked to the Internet through Finland, was the only means of communication between Moscow and the outside world.

The Internet mailbox hosts debates and forums, serious and light-hearted, on all kinds of subjects, from science and politics to leisure, sports and games. In order to receive messages in your electronic mailbox from other subscribers and to send out replies all you have to do is subscribe. It is an unparalleled device for finding the solution to a problem. There is always someone along the highway who knows the answer.

Images and sounds, as well as computer data, travel around the Internet, which makes it possible to consult from a distance the catalogues of the world's great libraries, that of the Library of Congress, for example, in the United States, visualize satellite photos taken by the American national meteorological service, admire the masterpieces on display in Madrid's Prado, the Orsay Museum in Paris or the Uffizi in Florence. It is also possible to procure software—free-of-charge if it is in the public domain (*freeware*) and for a nominal charge if it is *shareware*. Books and newspapers can be published electronically on the Internet, and international conferences can even be organized through it.

✔ WHO'S INTERESTED?

Most universities and a growing number of research bodies are already hooked up to the Internet. Many United Nations agencies are also on it—the United Nations itself, the International Atomic Energy Agency, the International Telecommunication Union, the United Nations Development Programme, the World Health Organization, the World Bank, the Food and Agriculture Organization, UNICEF (the United Nations Children's Fund) and UNESCO. It is thereby possible to find out about each agency's goals, activities, programmes and publications, consult each agency's data base and hop from one server to another.

It is also possible for individuals to hook up to the network through private companies such as Compuserve and Delphi. All that's needed is a computer, a modem (telephone convertor) and communications software.

Benefit from the Internet explosion is not confined to the developed countries; it is also a particularly interesting tool for the developing countries, although the situation varies widely from region to region. The Internet has great potential for promoting exchanges and strengthening North-South and South-South co-operation, for it facilitates direct contact between researchers and helps those who feel cut off to get into the mainstream.

✔ GROWING PAINS

Originally free of charge and intended to provide mutual help among researchers from around the world, the Internet is changing. In the United States 60 per cent of the institutions presently connected to it are private companies, as against 40 per cent in France. A number of pay-per-service networks are appearing. Problems are arising about security, information reliability and copyright.

Anyone with a personal computer can disseminate information. And it is very easy to copy the electronic version of a document or a data base and rebroadcast it, with or without modifications, under a different name.

To provide security on the network and prevent undesirable intrusions, devices known as firewalls—barriers that shut off parts of computer systems—have been developed. Confidential information must be encrypted before being sent.

The Internet is also a victim of its success. Traffic jams are not unknown. At certain times of the day the networks are so crowded that it is practically impossible to connect with certain servers. In France, for example, it is a good idea to take advantage of the time difference by working with American servers in the morning.

Despite its growing pains, Internet is already an exceptional means of communication. Cross-border transfers of information have become a daily reality for millions of users the world over. ■

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FURTHER INFORMATION:

■ John R. Levine, *Internet for Dummies*, San Mateo, Ca., IDG Books, 1993, 352 pp.

■ Ed Krol, *The Whole Internet: User's Guide and Catalogue*, Sebastopol, Ca., O'Reilly cop., 1994, 534 pp.

■ *Recent Literature on Internet, Electronic Mail and Electronic Networking*, bibliography available from the Institute for the Development of Research of the University of Tilburg, Holland. E.mail: ewoldt@kub.nl; fax (31) 13 663 015.

■ Anne Sanouillet, *L'Internet pour nous autres*, Centre du 20e siècle. Université de Nice/Sophia Antipolis, 81, rue de France, 06000 Nice, France, ISBN 2-902311-86-9, 20 pp.

From global village to global mind

by Derrick de Kerckhove

While television has turned the planet into a village in which we are all neighbours, telematic networks abolish time and space and suppress traditional bearings of personal and collective identity

If books, especially novels, fostered and sustained the development of private minds in public space, television has done the reverse, bringing a public mind to private spaces. Television screens are collective extensions of our individual minds. Instead of information being processed by a single person, namely me, the television screen presents me with information processed by a collective of which I am an integral part.

"Live" TV, or "real-time" TV, is a kind of collective eye which allows my eyes to look at reality processed for me and for every other person watching at the same time. Whenever something happens that is internationally newsworthy, a huge thoughtwave made up of millions of people grinding the same information at once forms and reforms itself every evening and sweeps over the nations from one time zone to another. Even in its standard programming, TV is a form of collective imagination, averaging people's hopes and fears on the basis of a regular public-pulse-taking through ratings.

Such thoughts may have occurred to American journalist Bill Moyers when he called his four ground-breaking shows on the workings of television "TV, the Public Mind" (1989). Of course, Moyers was really thinking about U.S. television, and at that time Hollywood and the Big Three U.S. channels still seemed to present a united front and a coherent vision of the world. Two questions are raised when the notion of television as a form of public mind is examined more closely. First, is the public mind uniquely dependent on TV, and if it is, then what happens when TV and TV audiences fragment as they are doing today? Second, is TV generating a public mind beyond the confines of the United States, and if so, who is running the show? According to French culturologist Augustin Berque, "If the world said OK to the crusade against Saddam [Hussein], it is not only because the world drinks Coca Cola. It is because, to a large extent, the meaning of today's world finds its source, its creation and its distribution in the United States."

There is no doubt in my mind that television has done a lot to expand a sense of global destiny beyond the confines of North America. Trips to the moon, royal marriages and the Olympics, among other world coverage shows, have served to provide a common focus for the attention of hundreds of millions of people of different cultures. Cheap Hollywood movies and soaps have proposed to do the same on a day-to-day basis. Thus it is quite true that the public mind of the world has been more or less grounded in the country where the greatest expertise in television was found. But this may be changing very quickly. Just as quickly, in fact, as the world itself is "changing its mind".

With the U.S. military controlling all news delivery via the American news channel CNN, the Gulf War was perhaps the last occasion when a single television channel was given full range, albeit under duress, for the one-way production

Above, an impression of a trip inside a computer.

Left, *Madeleine Reading,* a portrait by the Flemish painter Ambrosius Benson, who died in Bruges in 1550.
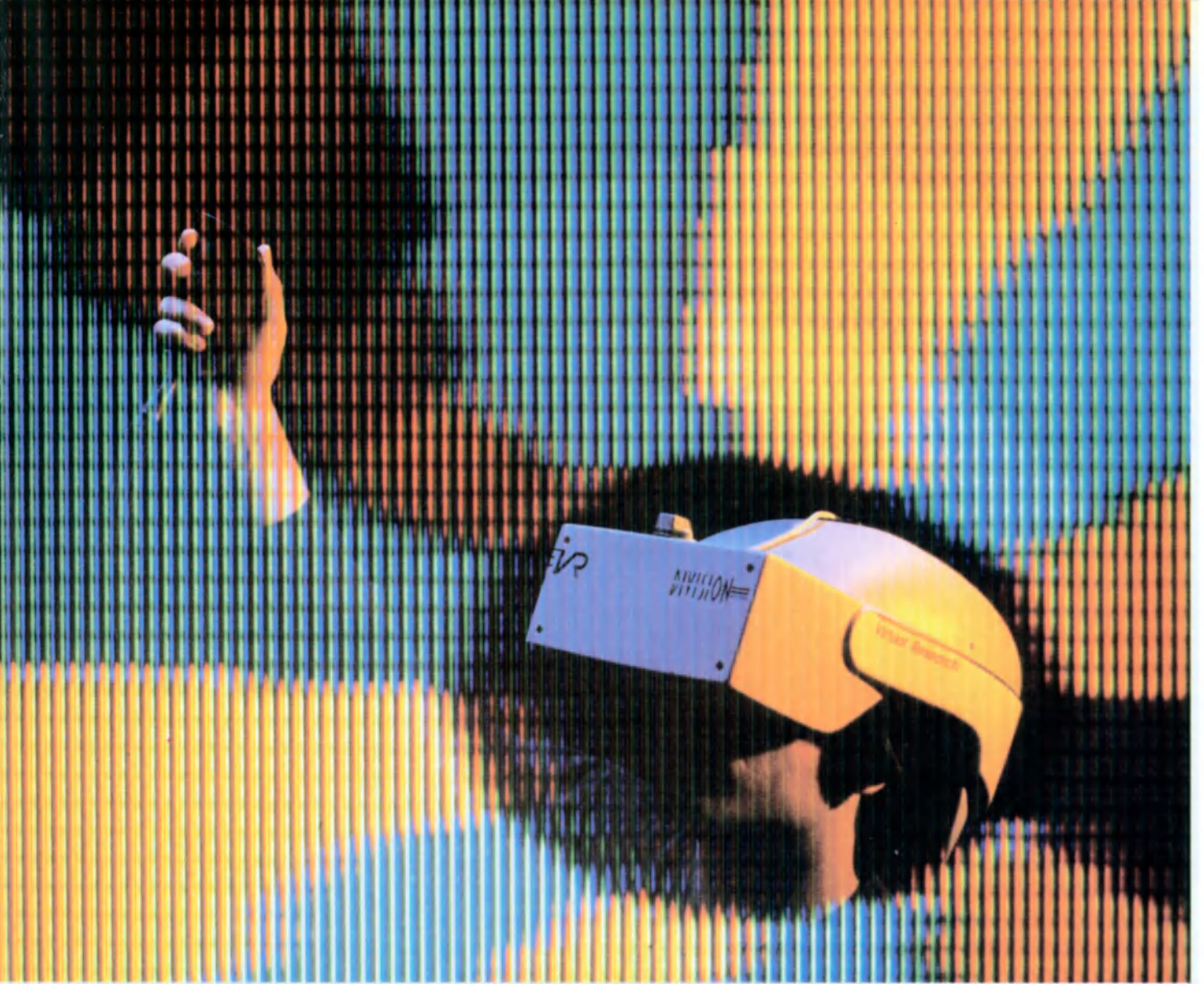
of meaning. The era of television as the principal supporter of the mass creation of meaning may be over. At least three new technological factors are undermining the hegemony of television and especially of American television: interactivity, digitization and networks.

Interactivity, the recovery of psychological autonomy from TV

Television had already begun to "disintegrate" in the mid-1970s with the invention of the zapper. Zapping in and out of a commercial was the first step in giving power to the people over the screen. The second step was the widespread distribution of videorecording equipment. By recording one programme while watching another, or recording a programme while doing something else, the private user was becoming an informal "editor", taking revenge over the content/time constraints of television broadcasting. The third step was the appearance and fast distribution of personal computers.

Interactivity only became a concept after people had begun to use a keyboard and a mouse. They began to feel that they were taking

power over the screen. Another step, a sidestep really, is the development and continuous refinement of videocameras. While in the 1960s and 1970s everybody was a consumer of television, in the 1990s we can expect to see more and more producers taking advantage of lightweight and efficient electronic pencils. After decades of passive acceptance of their dictatorship, we have learned to talk back to our screens.

Universal digital culture

By 1991, personal computers had already stolen the attention of a full generation from the seduction of the television screen. Computers affect culture in depth because they combine the characteristics of a mass-medium with those of a private one. They allow universal access to individual input and vice-versa. The new universalizing principle is that of the binary code. Thanks to digitization, the binary code can translate anything into anything else—forms, textures, sounds, feelings, even smell and why not taste soon. This is the nature of multimedia.

The binary code is the new common sense, the new common language which allows us to

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'Computers combine the characteristics of a mass-medium with those of a private one.'

recreate technically outside our minds the complex arrangements that we have learned to build in our private imagination when we read novels. It is much more powerful, spreads far wider, and provides far more complex access to information-processing than television.

On the other hand, in spite of its universal calling, the binary code does not present a particular threat to local cultures and identities. On the contrary, it may allow them to flourish eventually because it is capable of supporting competing representations in non-exclusive fashion. The kind of collective mind produced by computers is different from the public mind of television. It is not only an *object of attention*, but also the subject of processing. It is an activity, not a spectacle. Thus it includes the user in the process. This is the reason why computers depend on networks to fully realize their socio-cultural potential.

Networks and other highways

By 1991, computers were already celebrating what has become known as "convergence" with the telephone (the most powerful of the unsung technologies of communication) and television. The networks of national telephone companies today are vying for markets once reserved to a few broadcasters and cable operators. Audiovisual information is becoming ubiquitous as multimedia. On the electronic data highway, television will eventually lose its status as a broadcasting mass-medium and acquire that of the telephone, the narrowcasting medium with a billion interactive channels.

Below, a tele-conference in the United States. Participants can talk to each other from a distance, maintain visual contact and exchange documents.

The Internet, which is the earliest and as yet the most complete expression of the electronic data highway, comes as close as has ever been possible to enabling a very large number of people to process information simultaneously. It is a technological expression of collective consciousness. To be more precise, the Internet is becoming a kind of global subconsciousness, with myriads of points of immergence for individuals into the collective, and points of emergence of the collective into the individual. Thus digitization turns everything into information, interactivity allows anyone to get into the processing, and networks connect every user to every other.

Where do we all fit in?

The idea of the "global village" was adequate for the television era which made everybody a neighbour to everybody else. It is quite inadequate to describe the new conditions of networked communications. Indeed, if television clearly supported the notion and even the perception of a common space, instant data networks abolish both time and space. They thus suppress the traditional bearings of identity, both personal and collective. In fact, many people seem to cultivate a new kind of anonymity on the Net. It is also apparent that, far from discouraging local initiative, the Net is promoting all kinds of new associations based not on political but on psychological boundaries. Different cultures can surely coexist on the Net. So we may be soon moving out of the global village, out of the public mind, into the "global mind". The rules that operate that mind are still unknown, but one absolutely essential criterion for guiding nations in their regulatory process is that universal access *and* guaranteed privacy be ensured.

While regulators are trying to resolve that paradox, we are all fairly confused. The creation of meaning is not homogeneous any more, ideologies have been thoroughly trashed along with the Berlin Wall, and television is henceforth too decentralized to pretend to the status of a public mind. Political and social strife find us irresolute. We are now too conscious of local sensibilities rather than insensitive to them. We fear to tread where we once ran. The world's record in Bosnia, Somalia and Rwanda is dismal and yet, around the evidence of disaster, there are signs of hope. Global thinking, evidenced by a rising sense of ecological responsibility and attendant environmental accounting, is finding expression in local action. Multiculturalism and political correctness are beginning to address North-South concerns. All these are indicators that in spite of hesitations about interfering in local affairs, the general level of attention and psychoplanetary pressure is rising. ∎

The shoals of freedom   by Marcin Frybes

In central Europe 1989 marked the end of the state-controlled media. But after the first flush of excitement, the press is now having to come to terms with market realities while avoiding compromises and maintaining standards.

Above, Cracow, February 1990. Rock fans at a concert inaugurating *Radio Malopolska Fun,* the first free foreign radio station in Poland.

Contrary to what some observers have suggested, the process of transition from communism in Eastern Europe involves more than the introduction of free market mechanisms and democratic elections. The transition to a modern society is first and foremost a cultural process which presupposes the reconstruction of areas of social communication. The way in which the media landscape in these countries is gradually taking shape has a vital bearing on their future.

For five years, these countries have been experiencing unprecedented economic, social and political upheaval. The information sector has witnessed spectacular changes, especially in Hungary, Poland, the Czech Republic and Slovakia, where radical reforms were adopted from the outset. Only a few years ago, the media in these countries were directed, controlled and manipulated by the authorities, which enjoyed a total monopoly, further consolidated by censorship. They were able to fabricate a reality which accorded with their interests of the moment and to prohibit, discredit or sideline any presentation of the situation that differed from their own. Far from reflecting currents of opinion and the wide diversity of social needs, the media landscape did no more than reproduce, at best, internal dissensions within the party apparatus.

Today this scene is changing fast, but uncertainty still surrounds the audiovisual media. Governments are reluctant to carry out the heralded privatizations because they are afraid of depriving themselves of a powerful lever to influence public opinion. In Hungary, as in

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An editorial meeting at the Polish daily *Gazeta Wyborcza*.

The Bucharest Press Centre, below, was once the palace of Romanian President Nicolae Ceausescu.

Poland and Slovakia, the fight for control of television has been mobilizing the entire political class for several months now. And the successes of a few new private radio stations barely scratches the surface of the hold on national audiences enjoyed by public radio stations.

On the other hand, privatization of the written press (which has traditionally been important in these countries) is now almost complete. The governments which controlled most of the titles until 1989 found themselves so lacking in support after only a few months that some have since been trying (without notable success) to create new organs that are more favourably disposed towards them.

New markets

The emergence of the new press markets has been marked by three main phases. At first, a flood of pent-up words was released in an atmosphere of fascination with freedom regained. The fall of the communist regimes and the end of censorship and cumbersome bureaucracy sparked off a veritable explosion of new publications. At this stage the creation of new titles often reflected a quest for identity and a need for social expression that had long been held in check. The very fact of envisaging the publication of a magazine (many projects never reached fruition or were soon abandoned) was a way of defining a new area of freedom to be occupied by the writers concerned.

In the 1990s, the press has therefore played a major role in the restructuring of the political scene. By giving the different currents of opinion a platform for expression, it eventually encouraged the formation of new political parties—even though, with the passage of time, relations between the press and the rising political elites have become increasingly conflictual.

This first phase of euphoria with "speech regained" only lasted for a few months. New problems made their appearance, associated with the discovery of the realities of the market economy. With the end of public subsidies, rising paper and production costs, and the appearance of competition, sometimes cutthroat, many publications folded, while others abandoned their original aims and were obliged to adapt rapidly to the new demands of the public.

However, the laws of the market were imposed with a vengeance with the arrival of the major international press groups. This happened relatively quickly in Hungary and somewhat later in Poland and the Czech Republic, while the process is still in its infancy in Slovakia. Today, foreign investors control more than half the press market in Central Europe: Hersant, Springer, Bertelesmann and Marquard have bought up the best titles of the former communist press, in particular the major national dailies and many regional newspapers. At the same time, minor "national empires" have been established, usually at the instigation of former emigrés who had made their fortune abroad and decided to invest in their country of origin.

The unbridled diversification of the early

days has now given way to a phase of restructuring which is leading to new forms of dominance of the press market. Faced with foreign competition, some titles famed for their clandestine origins and their pride in their independence, nevertheless had to appeal to foreign capital in 1993 in order to finance modernization. Two leading dailies are typical examples: *Gazeta Wyboreza* in Poland and *Lidove Noviny* in the Czech Republic.

Exorbitant power

Finally, the third phase in the formation of press markets in central Europe corresponds to the discovery by the political and economic élites of the simple fact that the press wields enormous power over public opinion. The leading newspapers are more popular than the political parties and must endeavour not only to gain the loyalty of their readers but also to measure the potential political consequences of their editorial policy. In a world which has lost its bearings and from which the traditional authorities have disappeared, the press often seems to wield disproportionately great power. Some observers maintain that the victory of the former communist parties at the last elections in Poland and Hungary is not attributable solely to the frustrations engendered by the social cost of economic reforms but also to the highly critical attitude of the press to the first democratic governments in the transition period.

Although this is not a specific feature of central Europe, the media are increasingly tending to act as "mediators" between divergent interests, needs, programmes and points of view. Sometimes the media tend to take the place of the nascent political system. Hence the proliferation of conflicts between the media, which are jealous guardians of their new-found independence, and an emerging world of politics. Hence too the growing interest taken in the media by the new centres of economic power—private enterprise and the banks—which are endeavouring to win control—or at least the sympathy—of some major press organs.

A cultural revolution

In the last five years, the people of Central Europe have not only discovered freedom of speech but also products to which the public in the West had long been accustomed but which for them represented a veritable cultural revolution. In the print media alone, they were suddenly offered a vast range of newspapers, colour magazines for every taste and readership, aggressive new scandal sheets packed with human interest stories, to say nothing of porn magazines—all this with a print quality that was unknown in the (dull and monotonous) communist press and with a profusion of advertising that did not exist before 1989.

Satellite dishes in Tirana, Albania.

Readers who used to go to great lengths to get hold of their favourite newspapers—some were practically impossible to find—are today assailed by a host of new publications (in Poland alone, half the titles have only been in existence since 1989). They have lost their bearings and often find it hard to make a choice. Under the pressure of new economic constraints and lacking competent journalists, the press for its part easily lapses into sensationalism.

Although the press in Central Europe is for the most part free and independent, it is still searching for a role and the right language to address societies that have become destructured and are in a process of rapid change. Through its very existence and plurality, it is making an important contribution to the liberation of social life from state control and to restoring the autonomy of civil society. But does it not by the same token run the risk of further amplifying these phenomena of social disintegration and the accompanying disarray? ■

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Monopolies, minarets and videos

by Sadok Hammami

Because of strict state monopolies and inadequate programme output, the Arab public is looking elsewhere for what it cannot find at home.

In the Arab world, where demands based on identity and religion are forcefully pressed and where the present is continually haunted by the past, the question of communication is fraught with drama. All societies are nowadays concerned by the link between cultural identity and the globalization of communication, but it is a distinctive feature of the

Below, television on the move in Cairo's Imbaba district, 1994.

Arab world that memories of the past intrude into the very heart of modern life. This revival of the past is particularly noticeable in the field of communications.

The place of the media is closely linked to the status of the "sanctuary" in the community. In and around the mosque there grows up a culture of resistance not only to modernization but also to the authorities, thus reviving an old form of territoriality in which the new media are always faced with competition. There is an extraordinary competition nowadays between the sound of the muezzin echoing from minarets and the visual fascination of satellite dishes—symbolizing the contradiction of a world technologically united but culturally fragmented.

But this paradox shows itself mainly in state media monopolies and in the many forms of resistance to which they lead. The communication issue is a focus for all the cultural blockages that have characterized the development of these societies: state hegemony, the breakdown of political bonds, a return to tradition. . . . Originally required to be tools for development, the media (notably television) have helped to intensify the authoritarian nature of the established order. By consistently devoting itself to the glorification of charismatic leaders, television has in general fostered the personality cult in politics.

In the Arab world radio and television, with a few exceptions, are limbs of the state monopoly. Access to them is strictly controlled. Economic factors such as rising production costs, political factors such as the restraining effect of censorship, and social factors such as increased demand resulting from the growth of the middle class, all help to aggravate a creative crisis. Egypt, the only Arab country with its own programme industry, is the only exception. This situation drives people to seek elsewhere what they cannot find at home, and makes for increased cultural dependence on the outside world.

The saucepan strategy

Three different strategies tend to be adopted. One is to plug surreptitiously into other networks—a common practice in North Africa, because of the proximity of Europe. In Tunisia, for example, some picturesque reception techniques were devised during the 1980s. By

attaching a metallic item (usually a saucepan) to their television aerials, people can usually manage to pick up the Italian channels. In Algeria six or eight million people receive the European channels by means of improvised cable networks. But the prime instrument for cheating state monopolies is the video recorder—for Arab audiences still the best way of getting programmes which are all the more desirable for being forbidden.

Faced with this anarchy, and with calls for the liberalization of cultural life, several states have decided to relax their monopoly control of the media, either by opening their radio networks to public or private outside operators or by legalizing the direct reception of foreign broadcasts by dish aerials. This makes it possible to retain a monopoly over national television whilst at the same time monitoring the flow of programmes.

"All societies are nowadays concerned by the link between cultural identity and the globalization of communication". Below, television in Yemen.

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Algiers, 1992.

SARAJEVO, SPRING 1993.

The third strategy is to reinstate places traditionally devoted to communication—this is reflected in the emergence of mosques as centres of political debate. By keeping television under their thumbs, states have fostered the take-over of mosques and their use in propagating the ideologies of confrontation. The "informal" appropriation of mosques brings out the tensions inherent in the emergence of public debate.

Freeing creative forces

Closed societies are today inconceivable. The opening of national forums to outside media does not necessarily result in cultural dependence, except when it is used to perpetuate domestic ideas about social inequality. Calls for "the defence of cultural identity against the Western media" are primarily ideological arguments put forward by authoritarian states and politicians to feed nostalgia for a non-existent primeval purity.

To be free of real cultural dependence the first essential is to liberate people's creative potentialities. The media system in the Arab world needs to be built first and foremost around the values of free discussion and free exchange of views. Shibboleths about identity, the diabolizing of technology, and paranoiac ideas about other people will not help it to regain its cultural sovereignty or make its creative presence felt in the world. ∎
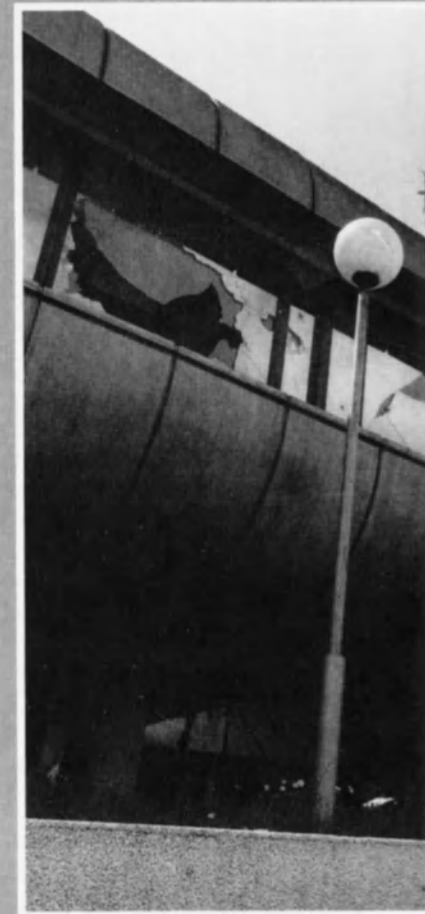
SADOK HAMMAMI,
of Tunisia, is writing a doctoral thesis on mediation and the image in Arab-Islamic culture.
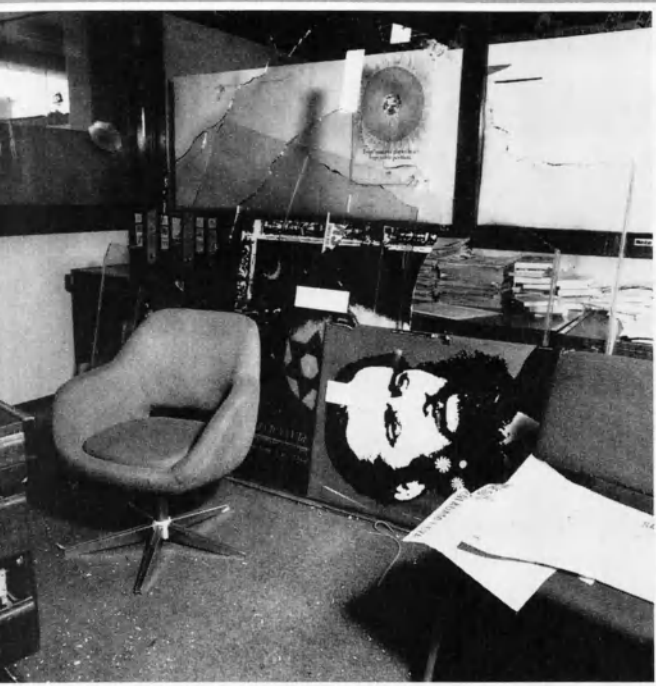
3

1) The headquarters of the leading daily *Oslobodjenje*. The building had been hit by 2,000 shells in the previous year.
2) The newsroom can no longer be used.
3) A cameraman from Bosnia-Herzegovina television films damage inside the building.
4) The journalists courageously continue to work, live and sleep in a nuclear shelter in the basement.
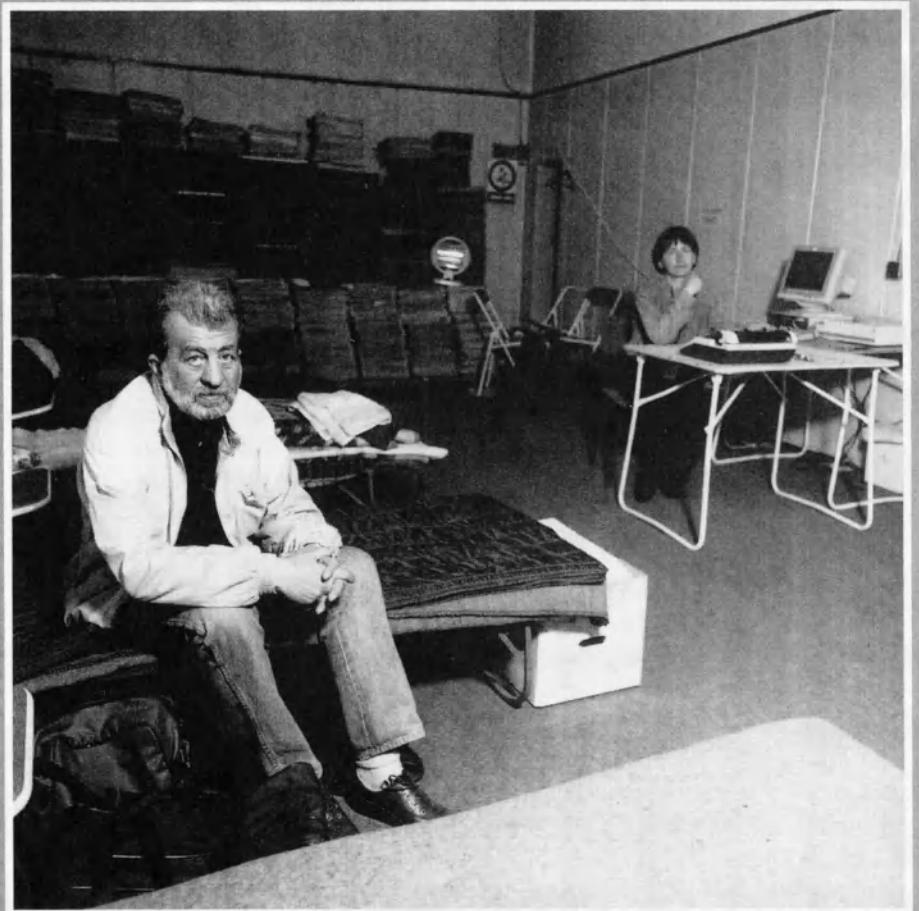
4

UNESCO'S STRATEGY

Interview with Henrikas Yushkiavitshus

UNESCO's Communication, Information and Informatics Sector, created in 1990, plays a leading role in the Organization's activities. The goals of its 1994-1995 programme, entitled "Communication, Information and Informatics in the Service of Humanity", are to encourage the free flow of ideas, promote the development of communication, safeguard the heritage of archives and libraries, consolidate international co-operation in the field of information and strengthen countries' informatics capacities. Here Henrikas Yushkiavitshus, the Assistant Director-General of UNESCO who heads this sector, presents the main features of this programme.

■ **What is UNESCO's strategy in the communication field?**

— Our key words are media pluralism and independence. Since 1992, 30 per cent of the funds allocated by the International Programme for the Development of Communication (IPDC), the main operational arm of UNESCO's new communication strategy, have gone to private press projects. In order to ensure the free flow of information and eliminate all restrictions on it, we have concentrated our efforts on professional training and know-how. In the present world situation, in which an independent press is taking shape in countries whose experience of democracy is still in its early days, it is essential for journalists to understand exactly what a free press means. Furthermore, while it is true that there can be no democracy without a free press, it is equally true that a free press cannot exist without democratic legislation. And so we have compiled basic information on legislation in certain democratic countries in order to help states which have asked for such data, and we have proposed solutions to their problems.

In addition to the problem of democracy, the developing countries are faced with severe financial constraints. One of UNESCO's fundamental objectives is to help them produce their own programmes and newspapers. There is a lot of talk today about "information superhighways", but we forget that they can often be littered with roadblocks. In partnership with the International Telecommunication Union UNESCO has developed a study on telecommunication tariffs, an important factor in the flow of information.

■ **What important projects are under way?**

— We recently approved forty-two new projects in developing countries, and in a sense they are all important. There are several priority areas—Africa and the least developed countries, the situation of women. . . .

We have, for example, a project on the "Development of the independent press in Africa", which has been co-funded since 1993 by Denmark, France, Italy and the United States, and an international symposium on "Women and the Media" was held in Toronto (Canada) in March 1994.

The media have an important part to play in peace-building, and this is why we are giving support to *Oslobodjenje*, a daily newspaper published in Sarajevo, and to the humanitarian radio station *Gatashya* in Rwanda. UNESCO has also contributed to plans to restructure the audiovisual media in Cambodia, Haiti and Mozambique. With the International Press Institute we helped monitor the press situation before and during the April 1994 elections in South Africa, and we are currently supporting a new programme for training journalists and strengthening media structures in a post-apartheid society. We are also involved in setting up a Palestinian broadcasting corporation and modernizing the Palestinian news agency.

We attach great importance to the creation and development of regional news agencies such as the Caribbean News Agency (CANA), which is now working independently, and the Pan African News Agency (PANA), which has been completely restructured.

Many of our projects are connected with local radio stations, which are becoming increasingly popular because they allow members of society to express themselves freely. Here too, UNESCO is active in many parts of the world—the Philippines, Nepal, Mauritania, Gambia. . . .

■ **Your sector also handles questions relating to information and informatics.**

— Yes, communication and information cannot be dissociated. We have some very interesting projects in this field. One of them, "Memory of the World", is designed to introduce and facilitate the use of new technology for the preservation of rare manuscripts. In conjunction with the Czech National Library in Prague we have brought out a CD-ROM reproducing highly precious manuscripts. In Latin America we are helping to make an inventory of nineteenth-century newspapers. We are also working to safeguard manuscripts from the great mosque of Sana'a in Yemen, some of which date from the first century of the Hegira (A.D. 622).

UNESCO has helped set up the International Freedom of Expression Exchange network (IFEX), which enables network users to receive daily information on their computers about violations of press freedom and about journalists in danger. ■

FROM THE COLD WAR
TO THE ERA OF NEW TECHNOLOGIES
by Alain Modoux

Some fifty years ago, the founders of UNESCO singled out the "free flow of ideas by word and image" as an essential factor in the development of collaboration among the nations. For this fundamental principle to become effective, however, it would have to be practised by all states, and unfortunately it was incompatible with the totalitarian system existing in the countries of the East. This incompatibility became one of the key issues of the Cold War, which was indeed partly a communication war.

In the 1970s and 1980s, therefore, UNESCO became one of the hottest arenas of East-West confrontation. As the German philosopher Hannah Arendt put it, "the force possessed by totalitarian propaganda lies in its ability to shut the masses off from the real world".[1] Arguing that there could not be a totally free flow of information as long as the dissemination of this information was so strongly imbalanced in favour of the North (i.e. the West), the Soviet Union skilfully took advantage of the understandable frustration of the developing countries to impose within UNESCO its own interpretation of the so-called "New World Information and Communication Order" (NWICO). Its objective was to limit, and if possible to prevent, the penetration of the big Western media into the territories it controlled. This was one reason, although not the only one, why the United States and the United Kingdom decided to leave UNESCO respectively in 1984 and 1985.

The end of the Cold War gave UNESCO a unique opportunity to work out an approach to the communication issue that was adapted to the needs of both the emerging democracies in Eastern and Central Europe and the developing countries. In November 1989, UNESCO's General Conference adopted by consensus at its twenty-fifth session a "new communication strategy", the objective of which is "to ensure a free flow of information at international as well as national levels, and its wider and better balanced dissemination,

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After being a hostage of the East-West confrontation in the 1970s and 1980s, UNESCO can now encourage a wider and better balanced flow of information without any obstacle to freedom of expression.

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without any obstacle to the freedom of expression. . . ."

Communication and democracy

The first objective of this "new communication strategy" commits UNESCO to promote freedom of expression, which is the corner-stone of the human rights edifice, and freedom of the press, which is an essential component of any democratic society. UNESCO supports the action of the intergovernmental and nongovernmental organizations specialized in the defence of these fundamental freedoms, while preserving and developing its own means of action. Furthermore, in a number of countries it is helping to pave the way for the creation and strengthening of pluralistic and independent media.

In certain contexts of ethnic and/or sectarian conflicts, UNESCO, in liaison with the United Nations and various international media organizations, is also supporting the local media that are independent of the parties to the conflicts, as long as they provide non-partisan information and promote coexistence between ethnic and/or sectarian groups.

Finally, UNESCO must react against the growing use of violence in the mass media—cinema, television, video, comic strips, electronic games—which provide people, in particular children, with a vision of human relations which is in total contradiction with the spirit of the Organization. "Violence on the screen" is one of UNESCO's priority concerns. There

is no doubt that it would be very difficult to set up and enforce universal standards in this area. Moreover, such an approach might be used as a pretext to prejudice freedom of expression. Hence UNESCO is eager to foster dialogue with and among those responsible for creating, publishing and broadcasting, with a view to encouraging them to determine themselves the limits that should not be overstepped, bearing in mind the cultural context and the public these works and products are addressing.

Communication and development

The second objective of UNESCO's new strategy is to strengthen communication capacities in the developing countries, where the participation of the people at grassroots level in the communication process remains in general very low. Such causes as the struggle against poverty, education for all, the preservation of the environment, the fight against Aids, the promotion of human rights and of a culture of peace will come to nothing if they are not taken up by those directly concerned—people living in the rural areas and on the edges of big cities. These people should be given the means and the skills to voice their opinions and aspirations. Development, participation and communication form part of a continuum.

In February 1992, the International Programme for the Development of Communication (IPDC) decided to modify its rules in order to accept projects emanating from the private sector. In so doing, it was following up a recommendation made a few months earlier by a seminar held in Windhoek (Namibia), which was attended by some sixty publishers and journalists representing the independent African media. Unfortunately this change did not bring about a substantial increase in the financial contributions by the countries of the North to the IPDC budgets. While more than 10 per cent of the national product in the countries of the North is related in one way or another to the communication and information industry, it is hard to

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accept that less than 1 per cent of the programmes of national development agencies is devoted to the development of communication.

New issues

A third objective is related to the emerging multimedia era, which is raising fantastic expectations as to the sharing of knowledge and the fostering of intellectual co-operation. Here the principle of the free flow of ideas by word and image has a boundless field of application. UNESCO provides the international community with a forum of reflexion where the effects and possibilities of the new applications of communication and information technology can be examined.

The prospects offered by these new technologies, especially in the fields of distance education and continuing education, are promising. But there is a great risk that only a minority of humanity, among and within nations, will take full advantage of them. UNESCO should therefore focus its efforts on countries which are facing difficulties in this sphere. Situated in both North and South, these countries are in danger of becoming mere consumers of the products and services provided by the new technologies (transnational television programmes, audiovisual productions, data banks, electronic games, etc.). The stakes in terms of cultural and educational values are extremely high, ranging from the preservation of cultural diversity, especially the survival of minority languages, to education in non-violence, in tolerance, in human rights and international understanding, and the achievement of the necessary balance between the education and the entertainment programmes which the multimedia industry will soon be able to offer.

Finally, UNESCO will do its utmost to prevent the trend for cultural uniformity based on certain dominant models from endangering the timeless values of small and medium-sized nations in both North and South. This will be a difficult task but not an impossible one, to the extent that dialogue, open-mindedness and tolerance are the rule of conduct within UNESCO. ∎

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1 Hannah Arendt, *The Origins of Totalitarianism* (Part 3), Harcourt Brace Jovanovich, Inc., New York and London, 1966.

ALAIN MODOUX
is the Director of UNESCO's Communication Division.

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F   A   C   T

A FEW TERMS

Interactive: allowing a continuous two-way transfer of information between a user and the central point of a communication system, such as a computer.

CD-ROM (Compact disk read-only memory): A digital-sound laser disk that cannot be modified but is able to store a large amount of data in the form of text, images, sounds and computerized data. A 12-cm disk can contain 2,500,000 pages of text or 70 minutes of moving pictures. CD-ROM appears to be the ideal medium not only for providing access to data banks, dictionaries and encyclopaedias but also to more complex forms of information (e.g. the contents of a museum).

Binary code: a notation system consisting of only two digits, 0 and 1, which enables letters, numbers, sounds and images to be coded. It is used by computers to carry out all their operations.

Digital imaging: digital recording of an image by breaking it down into lines and dots ("pixels", or "picture elements") enables it to be modified and to produce all kinds of special effects. The sequence of binary values (0 or 1) that define the initial image can be interpolated, modified or recalculated. The same principle enables the computer to generate images.

Information highways: Advances in digital technology are erasing the boundaries between the text, sound and images that a single communications system can transmit. The media, telecommunications, electronics and computers can now converge in one big digital, multimedia and interactive network incorporating and distributing services that have hitherto been separate. On a single television or home computer screen it is now possible (for a fee) to receive, store, process and dialogue with all sorts of data, e.g. access library books without having to borrow them, visit a museum from the comfort of home, or "teleshop" in a department store. The integration of these high-yield information networks has become an economic and political battlefield. The Commission of the European Union in Brussels has estimated that it would cost 67 billion Ecus to fund an information highway project in Europe over the next ten years.

SOME UNESCO PUBLICATIONS ON COMMUNICATION

Books:
❏ *World Communication Report*
Paris, UNESCO, 1989, 576 pp.
❏ *Many Voices, One World—Communication and Society Today and Tomorrow* (Abridged edition)
Sean MacBride et al., Paris, UNESCO, 1984, 244 pp.
❏ *A Richer Vision: The Development of Ethnic Minority Media in Western Democracies*
Charles Husband (ed.), London/Paris, John Libbey/UNESCO, 1994, 149 pp.
❏ *Video World-wide: An International Study*
Manuel Alvarado (ed.), London/Paris, John Libbey/UNESCO, 1988, 328 pp.
❏ *Organizing Educational Broadcasting*
David Hawkridge and John Robinson, London/Paris, Croom Helm/UNESCO, 1982, 302 pp.

Monographs on Communication Planning series
❏ *Communication Planning Revisited,* (No. 5)
Alan Hancock, Paris, UNESCO, 1992, 105 pp.

Reports and Papers on Mass Communication series:

❏ *Alternative Media: Linking Global and Local,* (No. 107)
Peter Lewis (ed.), Paris, UNESCO, 1993, 130 pp.
❏ *Impact of Communication Technologies on Women,* (No. 108)
Silvia Pérez-Vitoria, Paris, UNESCO, 1994, 48 pp.
❏ *TV Transnationalization—Europe and Asia,* (No. 109)
Preben Sepstrup and Anura Goonasekera (ed.), Paris, UNESCO, 1994, 89 pp.
❏ *The Vigilant Press: A Collection of Case Studies,* (No. 103)
Paris, UNESCO, 1989, 116 pp.
❏ *Violence and Terror in the Mass Media,* (No. 102)
George Gerbner, Paris, UNESCO, 1989, 45 pp.

Two issues of the UNESCO Courier

❏ *The Media, Ways to Freedom* (September 1990)
❏ *Tele...visions* (October 1992)

F I L E

SOME KEY DATES

868: The first known book is produced in China.

1454: Gutenberg prints the Bible in Mainz.

1631: The first French newspaper, Théophraste Renaudot's *La Gazette*, appears.

1790: Claude Chappe's semaphore visual telegraph.

1826: Nicéphore Niépce's first photographs.

1837: Samuel Morse invents the electric telegraph.

1845: A rotary press patented.

1876: Alexander Graham Bell patents his telephone.

1878: Thomas Edison makes the first device for recording sound.

1895: Louis and Auguste Lumière screen the first motion picture in Paris.

1896: Marconi sends radio signals over three kilometres.

1907: Edouard Belin invents the "Belino" system of telephoto transmission.

1927: Vladimir Zworykin invents the iconoscope, a process for analysing images electronically, a precursor of the video camera.

1928: First demonstration of television in the Bell laboratories in the United States.

1930: The telex developed.

1932: Foundation of the International Telecommunication Union.

1940: Appearance of the tape-recorder.

1945: The ENIAC (Electronic Numerical Integrator and Calculator) computer is built, using valves, at the University of Pennsylvania.

1947: The transistor invented.

1959: Second-generation computers appear, using transistors (a thousand times faster).

1964: Third-generation computers appear with miniaturized electronic components.

1965: Launch of the first geostationary satellite (Early Bird) in the Intelsat system.

1981: IBM markets its first personal computer.

1985: CD-ROM brought out by Philips and Sony.

SOME FIGURES

■ The world telecommunication market (switching, transmission and terminals) amounted to $82.1 billion in 1992.

■ Four news agencies (Agence France-Presse, the British Reuters agency and two American agencies, Associated Press and United Press International) collect, process and transmit 80 per cent of the information dispatched for newspaper readers around the world.

■ Average expenditure on communication for a European household in the 1980s broke down as follows: telecommunications and postal services, 29%; the press, 23%; TV and radio, 21%; books, 12%; photos, 7%; records, 3.5%; computers, 2.5%; culture, 2%. (source: BIPE Conseil, Paris)

■ Despite these figures, it must be remembered that one person out of two will never make or receive a telephone call in his or her life.

■ **D. B.**

NUMBER OF RADIO RECEIVERS

Continents	Total (millions)					Per 1,000 inhabitants				
	1970	1975	1980	1985	1992	1970	1975	1980	1985	1992
World total	771	1,034	1,307	1,671	2,046	209	254	294	344	376
Africa	19	29	49	84	116	51	69	103	152	170
America	350	476	566	649	734	687	851	926	978	991
Asia	78	144	254	412	589	37	61	98	145	184
Europe (including former U.S.S.R.)	314	368	418	502	580	446	506	558	653	736
Oceania	10	17	20	24	27	526	816	865	964	990

Source: *Statistical Yearbook 1994*, UNESCO, 1994.

NUMBER OF TELEVISION RECEIVERS

Continents	Total (millions)					Per 1,000 inhabitants				
	1970	1975	1980	1985	1992	1970	1975	1980	1985	1992
World total	298	407	558	689	873	81	100	125	142	160
Africa	1.6	2.7	8.2	15	26	4.5	6.6	17	26	38
America	108	153	202	260	302	211	273	331	392	408
Asia	41	54	98	137	235	20	23	38	48	73
Europe (including former U.S.S.R.)	144	192	243	268	300	205	264	324	349	381
Oceania	3.8	5.6	6.8	8.6	10	187	264	296	348	375

Source: *Statistical Yearbook 1994*, UNESCO, 1994.

NUMBER OF BOOK TITLES PUBLISHED

Continents	Total				Per million inhabitants			
	1970	1980	1990	1991	1970	1980	1990	1991
World total	521,000	715,500	842,000	863,000	182	161	159	160
Africa	8,000	12,000	13,000	13,000	22	25	20	20
America	105,000	142,000	148,000	144,000	206	232	206	198
Asia	75,000	138,000	228,000	215,000	59	54	73	70
Europe	246,000	330,500	364,000	403,000	515	682	726	802
Oceania	7,000	12,500	12,000	12,000	362	548	450	442
Former U.S.S.R.	80,000	80,500	77,000	76,000	329	303	266	261

Source: *Statistical Yearbook 1994*, UNESCO, 1994.

NUMBER AND CIRCULATION OF DAILY NEWSPAPERS

Continents	Number of dailies		Estimated circulation Per 1,000 inhabitants	
	1975	1992	1975	1992
World total	7,780	9,279	110	113
Africa	170	204	12	15
America	2,950	2,965	158	144
Asia	2,190	3,750	55	64
Europe (including former U.S.S.R.)	2,350	2,247	304	364
Oceania	120	113	299	213

Source: *Statistical Yearbook 1994*, UNESCO, 1994.

Reinventing the press

Has the time come to reinvent the press? This question becomes particularly relevant against the background of two other prospective questions: what does the future hold for relations between the press (the "fourth estate") and the world of power, or rather the various centres of power? And what are the prospects for the written word in an age of channel-hopping, the multimedia revolution and information superhighways?

Has the press caught the power disease? Has it been contaminated by power? "If the press did not exist, it ought not to be invented. But the fact is that it does exist," as Balzac put it. I would contrast that vision with the ideal of Thomas Jefferson, who declared that "The basis of our government being the opinion of the people, the very first object should be to keep that right. And were it left to me to decide whether we should have a government without newspapers or newspapers without government, I should not hesitate a moment to prefer the latter." In 1787, he added, "I mean that every man should receive those papers and be capable of reading them".

The end of the Cold War and the upsurge of democracy all over the world are opening up new continents to freedom of expression. The press will have no future in these regions unless it builds highways to lasting freedom, and this will require a certain separation of powers. It is not enough to win freedom: freedom must also be organized and strengthened in face of established authority. However, the press is first and foremost the reflection of a society and of its readers. This is why Jefferson's message of hope still has meaning for us since it makes the link—which is at the heart of UNESCO's mission—between the principle of press and media freedom and its essential adjunct: literacy, education for all and the freedom of scientific and academic inquiry without which the concept of freedom can only be an empty shell.

There can be no democracy without freedom of the media and the free flow of ideas by word and image. We therefore cannot accept the slightest restriction on freedom of expression. However, independent media can only exist to the extent that the preconditions for freedom also exist. And there can be no free and influential press or true democracy without well-informed readers. Responsible and informed citizens are the best shield of democracy.

The new faces of freedom

UNESCO is working to promote free, independent and pluralist media in the public and private sector alike. Two meetings held with this in view by UNESCO, one in Windhoek, Namibia, in 1991, the other in Almaty, Kazakhstan, in 1992, have been major turning points and have opened up many new perspectives. In these "march-lands" of democracy where everything needs to be rebuilt or invented—freedom of expression, a free press, professional ethics—UNESCO is acting as a catalyst by promoting public and private bilateral initiatives, by encouraging the new print and audiovisual media groups and non-governmental organizations to work together, and by helping with the establishment of training centres for journalists. The Windhoek Declaration laid the groundwork for the reinvention, or perhaps even the creation, of a democratic press in the countries of the South and East which had been deprived of it for so long.

These new media, these new and often heroic journalists, many of whom have known imprisonment, are reinventing the press from day to day and drawing the new shapes of freedom, sometimes even laying down their lives in this cause.

The advent of a society of global communications, a "programmed society" in which computers, information and communication all converge, is revolutionizing our outlook on culture, education and development—indeed on life itself.

The civilization of the written word may well be replaced by a new empire of invisible and intangible signs, forming the basis of a new commercial, worldwide economy governed by what the American political economist Robert Reich has called "manipulators of symbols". And yet, the coming change will also be a transition that is rich in promise and will lead us to a civilization of knowledge and information. Some are alarmed by this trend, just as in the past some people were wary of the advent of the steam engine and the invention of the telephone and the computer. Will we come to regret the alienation of man enslaved to the

assembly line, as immortalized by Charlie Chaplin in *Modern Times*? We must now learn to navigate on the seas of information and knowledge. Postmodern society is awash with culture, but it has at one and the same time too much and too little culture. A danger lies in store for us here. What if technology is what the French writer Jean Baudrillard has called "a new artificial paradise of intelligence"? Will the human mind grow addicted to virtual reality, to simulation?

The multimedia galaxy

Hence the urgent need to reinvent the press and reinvigorate its critical function, its missions and its instruments. This calls for a fresh look at the new revolution in the media that transmit knowledge. Consider the great technical and social transformations of the past: they were closely linked to the radical changes affecting the acquisition, preservation and, above all, the flow of knowledge. The invention of writing led to historic changes. Printing gave birth to countless extraordinary developments and led to the industrial revolution. To what new shores is the cognitive revolution brought about by digital telematics leading us today? How will it reshape the press? What cultural changes will it bring in the long run?

The upheavals taking place today are signposts to the press of the future. The merger of the cultural industries into a single multimedia galaxy brings with it the risk of the hegemony of "edutainment", a mixture of education and commercial entertainment. Knowledge and culture in its various forms will indeed be available at home via a single multi-purpose appliance. But what of those who will not be able to afford the luxury of an electronically equipped home? In the medium term, the gap between the insiders and the outsiders will widen. Moreover, the impact of such a revolution is as yet ambiguous. Will it bring cultures closer together or on the contrary hasten the erosion of unique skills and forms of knowledge in a dazzling world of simulation based on products of low cultural quality but high added value?

In his 1994 report to the Prime Minister of France on information highways, Mr. Gérard Théry notes that "the press, which is one of the oldest and most important producers of information, will make growing use of the new networks" once it has entirely digitalized its production procedures, and that process will soon be completed in the most advanced countries. While increasing competition, which incidentally provides economic stimulus and is in keeping with democracy, the new electronic networks also provide a great opportunity for the press: they offer new means of dissemination to professionals with proven skills and expertise in this area.

Creative tension

With the information superhighways, these services will be developed and enriched through a considerable increase in the flow in communications, through interactivity and the possibility of combining text and images. The print media will thus further diversify their content, and at the same time develop new documentation and briefing services. New audiences and new readers are thus within reach of the press if it manages to act in time and transform itself successfully.

There are other key issues, such as free access of information to markets and networks; protection of copyright, which will be the theme of a UNESCO symposium in 1996; guarantees of independence which many publishers of electronic services would like to enjoy in relation to network operators—this raises the question of the control that is liable to be exercised in practice over access to networks and markets; the usefulness of clarifying the status of networks in order to promote the dynamic growth of new markets; and the types of support which must be provided for the digitalization of press archives, whose cultural implications and cost will be enormous. I also believe that some barriers against the excesses of competition, and the association of the press with the process of reflexion and experimentation on information highways, to take up two of Mr. Théry's suggestions, might contribute to a positive start.

It is in situations of "human tension" that it is possible to create, imagine, reinvent, give and contribute a part of oneself to the future. Changes take place at positions which are far from the point of equilibrium. Nothing can be expected of the complacent who lack the resolve and the dynamism to bring about change. They are too concerned with their own future to think of the common future. It is only through creative tension that one can discover treasures, get to the essence of things, and change direction.

More often than not, reinventing means knowing how to get back to the source and uncover the original seed; daring, with the sower's determined and clear-minded gesture, to sow the seed afresh in the field of our common future, to which sharing alone can give meaning. ■ **35**

The great temple of Thanjavur

by Appasamy Murugaiyan

A magnificent sanctuary rich in murals, sculptures and friezes bears witness to daily life in southern India a thousand years ago.

THE reign of Rajaraja I (985-1014), the greatest king of the Chola Tamil dynasry, marked a glorious epoch in the history of southern India. This exceptional figure, a fervent worshipper of Shiva, a great administrator and a valiant warrior, is immortalized in many inscriptions on the great temple of Thanjavur—the most impressive of the fifty or so sanctuaries which he built or restored.

The temple seeks to reconcile the spiritual and profane worlds. It is a religious edifice but at the same time a monument to the history, literature, art and architecture of the Chola empire.

The venerable rules of sacred architecture

The rules governing the architecture of the temples of southern India were particularly rigorous. From the sixth century onwards, stone was the only material used to build temples. Wood and earth, being less durable, were reserved for human dwellings. The shape of a sanctuary, its layout and architectural style, depended on the nature of the objects which were to be venerated in it and on the cult to which it was dedicated. Priests and *stapati* (craftsmen-cum-technicians) together determined the construction principles which were codified in

The temple's crowning glory, left, is the *vimana*, a 66-metre-high pyramid.

Above, in a recess of the *vimana*, a divinity guards the entrance to the holy of holies.

Below, an entrance gate seen from inside the temple.

learned treatises, the *Agama*, the *Vastu* and the *Silpa*. Once the site had been chosen, the orientation of the temple was uppermost in the minds of its builders. Thanjavur, which was built in the year 1000 or thereabouts, faces eastwards.

Three portals separate the visitor from the inner courtyard. The first, of more recent construction (fifteenth-seventeenth centuries) differs from the next two which give an immediate foretaste of Chola art and architecture.

Inside the inner courtyard, the visitor is welcomed by a statue (nearly 6 metres long) of a recumbent bull. This is a fine effigy of Nandi, the mount of the God Shiva. Then, after crossing the three pavilions of the main sanctuary, the *mandapas*, one reaches the holy of holies, which

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houses the *linga*, the phallic image of Shiva. Above it towers an immense 66-metre-high, 13-story pyramid, the *vimana*. This hollow edifice creates a void which unites the *linga* with the cosmos. The delicacy of its decoration, its profusion of niches and pilasters, its friezes depicting the Hindu pantheon surmounted by eight bulls make this a masterpiece of Chola art.

At the base, two rows of parallel walls frame the holy of holies and form a kind of two-story vestibule. The lower floor is famed for the beauty of its wall paintings, while the upper floor houses magnificent relief portraits of some eighty dance postures described in the *Natya Sastra*, a treatise written in the first century A.D. on which the principles of classical Indian dance are based.

The main sanctuary is surrounded by a constellation of small protective sanctuaries. One of them is specially dedicated to Karuvurar, the spiritual mentor of King Rajaraja. On the day when the temple was ready and the time came to install the *linga*, the priests noticed that, despite all their efforts, the special paste which was supposed to fix the monolith to its pedestal remained liquid instead of solidifying. The god could not be placed in position. In

despair, the king had a sudden revelation: the mystic Karuvurar must be present for the proper accomplishment of the ceremonies. Conducted to the temple, Karuvurar spat out what he was chewing—a mixture of betel leaves, areca nuts and quicklime—and used it to fix the *linga*! So it was that saliva, a symbol of impurity in Hinduism, was used here as a sacred cement.

Inscriptions that tell the story of everyday life

Thanks to the inscriptions engraved on its interior walls, the temple of Thanjavur is also rich in information on secular life: society, history, military history, the economy, administration, art and crafts. Rajaraja seems to have been the first Tamil king to have recorded the salient dates of his reign in addition to the events associated with the life of the temple. His successors were to do likewise.

On the walls of the main sanctuary is a list of gifts from the king and from his elder sister; those from his wives, entourage and officers are catalogued on the niches and columns of the temple.

The king's gifts reveal untold prodigality: utensils for ritual ceremonies and other ser-

vices; golden jewels set with pearls and gemstones to ornament the statues; villages, lands and money to supply the temple with rice; camphor, cardamom and perfumes to add fragrance to the water used for the ablutions of the deities; cattle to supply the temple with ghee (clarified butter used as a fuel for the lamps); musicians and singers for
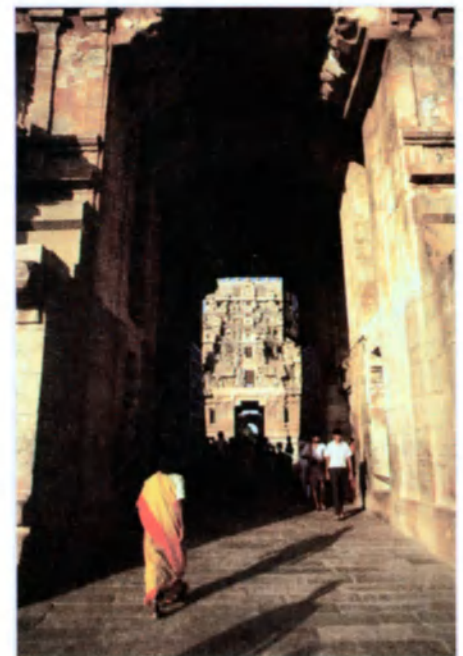
Facing page, the inner courtyard of the temple. At left is a 6-metre-long effigy of Nandi, the sacred bull ridden by the god Shiva. In background, the third entrance gate. At right, a smaller statue of Shiva's mount.

Facing page below, entrance gates to the temple.

Below right, the gallery lining the northern perimeter wall.

0   40 m

A: the holy of holies. B, C and D: the three *mandapa* (pavilions) of the main sanctuary. E: the *gopura* (entrance towers). F: the Subrahmanya shrine, added in the 12th century.
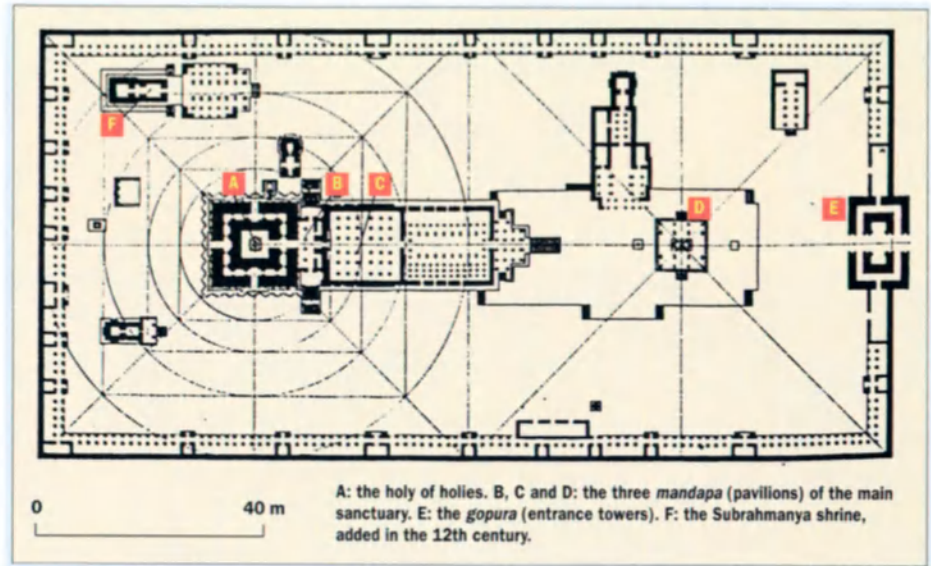
the liturgical chants; dancing girls; Brahmin servants, accountants, treasurers, goldsmiths, carpenters, launderers, barbers, astrologers, guardians.... The inscriptions even detail the earnings and tasks of each corporation.

Administration of the temple was under the direct control of the king and his army. Assemblies of different villages administered the temple's assets and public properties. Some received loans from the temple, the interest being used to finance rituals. The entire population was therefore associated in one way or another with the maintenance of the temple and with its rituals and ceremonies.

The inscriptions also tell us about the economic life of the period. We learn that there was a system of currency and that the main resources of the state were derived from income tax and land tax. We even know that the rate of interest on all loans was 12.5 per cent! No tax was levied on communal properties such as the village pool and the areas inhabited by craftsmen, or on roads and wells. Urban space was carefully distributed between the different social and professional categories—there was a "street of the archers", as well as a "street of the musicians" and a "district of craftsmen and shopkeepers".

In short, King Rajaraja turned the temple of Thanjavur into the focal point of the urban and rural life of his age. ∎

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FUZULI
poet of divine love

The life of Fuzuli (c. 1495-1556), whom Arabs, Persians and Turks alike acknowledge as one of their greatest mystical poets, is an enigma. Apart from a few details contained in a 17th-century Turkish biography (from which the portrait, left, is taken) which describes him as a jovial and pleasant man, all we know about him is what we can deduce from his work.

FUZULI, whose real name was Muhammad ibn Süleyman, is thought to have been born in 1495 in a small town in the region of Baghdad, Karbala or perhaps Najaf, where he served in his youth as keeper of the tomb of Caliph Ali. Later, he moved to Baghdad which he only left in his old age to make a pilgrimage to Karbala where he died, probably from the plague. He never saw Tabriz, Anatolia or India, which were so dear to his heart, just as he was never to become poet to the Court of Istanbul.

Although he won a high reputation among his contemporaries, earning for himself the title "prince of poets", he spent his life torn between impossible dreams of travel and glory and a relatively mundane daily routine. He wrote many odes in honour of potential patrons, singing the merits of Shah Ismail, founder of the Persian Safavid dynasty, who conquered Baghdad in 1508, and then hymned the brilliant exploits of the Ottoman Sultan Süleyman the Magnificent, who became lord of Baghdad in 1534. But all these eulogies brought him little profit. Worldly goods and honours were always to elude this poet "whom God had destined for misfortune". Only love was left for him.

"I have spoken of love and so it would be unfitting to complain," he wrote, summarizing the essential features of his life and work: an incessant quest for true love whose paths are known only to poetry.

But what is the true nature of such love that is apparently capable of compensating for so much solitude and sorrow? In the true mystic tradition, Fuzuli sees the human being as a projection or "witness" of God. His love for his fellow (whose name and sex are never revealed) is so sublime that it transcends physical love, whose fleeting nature is constantly denounced by the poet. Metaphorical love is seen as a bridge towards true love, the love of God.

Fuzuli demonstrates this in one of his major works, a verse novel inspired by the old Arab legend of Leyla and Mejnun. Following a galaxy of Persian and Turkish authors, he turned to the subject of this lytical epic and used it as an opportunity to deploy his own ethic and philosophy of sublime love.

The history of the two lovers lent itself well to that purpose. Ever since his earliest childhood, Qaïs Ibn Mulawwah, nicknamed Mejnun because he was possessed by djinns, had loved Leyla, a daughter of his tribe to whom he dedicated ardent poems. But Leyla's parents refused to give her to him as his wife. The poet lost his mind and his beloved was married to another man. The reasons for the parental refusal and descriptions of the fate of Leyla differ from one author to another.[1] But everyone agrees that Mejnun, who was smitten by this impossible love, went out into the desert to die, with wild beasts as his sole companions.

Fuzuli dramatizes the plot to an extreme degree. He suggests that Leyla's father saw the feverish verses of the young suitor as an attack on his daughter's honour. Mejnun is therefore condemned to madness and death precisely for having sung his love. Married to another man, Leyla went on to die of sorrow.

In Fuzuli's work, the love of these two young people—which would be termed platonic in the West and "udhrit" in the East (a reference to the Yemeni tribe of the Banu Udhra whose poets are dedicated to this fatal form of love)—embodies the ideal of passion pushed beyond human limits and rejecting all form of physical fulfillment. Fuzuli also uses it to illustrate the sacrifice which such a passion calls for: instead of trying to forget his distress, Mejnun implores God to make his love grow stronger so that his suffering may exceed the bounds of anything that a human being can bear. At the same time Leyla deliberately succumbs to a fatal sorrow and "melts like a candle held too close to the fire".

Love, which haunted Fuzuli all his life, did not prevent him from writing about many other issues, ranging from theology to medicine, ethics and astronomy. Set out in a number of *diwans* (or collections), some 700 *ghazals* (short lyrical poems) and a hundred or so *qasida* (elegiac poems) written in Azeri Turkish and in Persian, and the dozen surviving *qasida* in Arabic all bear witness to a great wealth of inspiration. A passionate lyricism, an acute sense of humour, a profusion of images and a dionysiac impulse provided a sensual counterpoint to his learned researches. They also inspired him with a power of evocation and an emotional charge which have remained intact for 500 years. ∎

J.S.

1 See "Why Ulysses?" by Mahmoud Hussein in the *Unesco Courier*, April 1993, pp. 34-36.

GREENWATCH

CLEAN DRIVING: A GREEN DREAM?

BY FRANCE BEQUETTE

I T is all too easy for a motorist enjoying a smooth drive along a good road to forget that the road and the vehicles that use it are far from harmless to the environment. In November 1989 the Council of Ministers of the European Conference of Ministers of Transport (ECMT) adopted a Resolution incorporating a wide range of recommendations designed to curb the impact of transport on the environment. The recommendations are exacting and constitute a major challenge for the nineties.

Transportation unquestionably contributes to the greenhouse effect by producing carbon dioxide (CO_2)—675 million tons in 1990 in the member countries of the Organization for Economic Co-operation and Development (OECD)—methane (CH_4), ozone precursors such as hydrocarbons (HCs) and nitrous oxide (N_2O), as well as chlorofluorocarbons (CFCs), tropospheric ozone (O_3, from 0 to 15 km above the earth) and water vapour. These gases are emitted from fossil fuel combustion within the manufacture, operation and disposal of transport systems and from the production and processing of fossil fuels. Vehicles, especially private cars, contribute 25% of the overall CO_2 emissions in most western European countries.

Greenhouse gas emissions are not the only forms of air pollution caused by road transport. Diesel engines (mainly lorries) emit oxides of nitrogen (NO_x), sulphur dioxide (SO_2) and microscopic particles (especially of carbon) that cause visible exhaust fumes and soil buildings. Sulphur dioxide and nitric oxide react in the atmosphere with water to form sulphuric acid and nitric acid, which can turn soil and lakes acidic and eat away at building stone. They may travel long distances in the atmosphere. Gases emitted by one country often cause acid damage in another.

THE CARLESS MAJORITY

Motor vehicle production has experienced spectacular growth since the end of the Second World War, rising from about 10 million vehicles per year in 1950 to 50 million in 1990. Today there are more than 675 million vehicles worldwide (including two-wheelers). Outside the OECD countries, however, most of the world's inhabitants do not use motor transport. The countries of Africa, Asia (excluding Japan) and Latin America contain more than four-fifths of the world's population, but only one-fifth of motor-vehicle registrations. However, the number of vehicles per head has grown by 20% worldwide over the past ten years.

As Laurie Michaelis of the International Energy Agency (IEA) noted in a report presented at a seminar on Transport Policy and Global

FLOWER POWER

The city of Brest in northwestern France has hit upon an attractive way of discouraging unauthorized bill stickers. Its public utilities division has covered some exposed surfaces with metal trellises and clad them with clematis, honeysuckle and other climbing plants. ∎

NO TEARS FOR CROCODILES

There are 23 species of crocodilians, including crocodiles, alligators, caimans and gavials, living in more than 70 countries. By devouring a wide range of prey considered of poor quality for human consumption and excreting into the aquatic system nutrients for high-quality food species, they contribute to the high productivity of fisheries in the tropical zones where they live. They also create pools and burrows that serve as refuges for many species in low-water periods. Papua–New Guinea, Venezuela, Zimbabwe and the United States are countries that reconcile the protection of crocodiles with waterfowl production, fisheries management and ecotourism. In Florida and northern Australia human-crocodile conflicts are controlled by selective hunting of specimens recognized as dangerous. Crocodilians are not, however, particularly good "indicator species", since they are robust, long-lived and highly adaptable, even to pollution. ∎

MARINE POLLUTION: SOMETHING TO DECLARE

In order to monitor ships that dump waste in violation of the MARPOL international convention on marine pollution signed in London in 1973, the French customs have acquired a second, twin-engine turbo-prop POLMAR aircraft with a range of nearly 2,000 km. (They already own one POLMAR plane, used for remote sensing.) The aircraft's side-mounted radar can detect hydrocarbon spills within a radius of up to 35 kilometres. An infrared scanner sweeps the area beneath the aircraft, enabling it to "see" temperature variations on the sea's surface that are linked to the presence of hydrocarbons. An onboard computer is used for compiling data, for mapping, and even for estimating the extent of spills. A video camera records the identity of the culprit and provides proof of the violation. ∎

Warming organized by ECMT in 1992, "It would be technically possible, by reducing car size and performance, to reduce the energy consumption, and hence greenhouse gas emissions, of petrol cars by a factor of three. However the resulting vehicles would not achieve much market share under current market conditions. Without compromising marketable vehicle characteristics, vehicle energy efficiency is unlikely to improve by much more than 10% before 2005." In fact the commercial success of a car, based on power, speed, size, security and comfort, is usually at odds with the goals of reducing energy consumption.

In his report Laurie Michaelis makes a comparative analysis of the advantages and disadvantages of the different kinds of fuel and the environmental effects of their production and consumption. Diesel emits 15% more CO_2 than petrol. Although the image of diesel-powered vehicles as dirty, noisy and heavy is fading, their number is restricted because they cost more to buy. Liquid petroleum gases (LPG) include propane and butane. Vehicles that run on LPG have a greenhouse gas emission rate 20% less than that of petrol vehicles. The major drawback of LPG is that supplies are limited, since it constitutes only about 5% of refinery output.

Compressed natural-gas engines emit little CO_2 but a lot of methane, which makes them less enticing. But the main unknown is how this innovative fuel will be received by the consumer. As far as alcohol fuels are concerned, methanol and ethanol are expensive to produce. They are less energy-rich, and so vehicles have to be fitted with larger fuel tanks, or vehicle range is reduced. They are also corrosive,

Heading into Death Valley, California (U.S.A.).

and if they were adopted as fuels, some materials currently used in engines would have to be replaced. Hydrogen seems to be the ideal fuel, since its combustion in air produces water and certain nitrogen compounds. If it is obtained by electrolysis, however, with the current average electricity generation mix in OECD European countries, the plants generating the necessary electric power for this operation produce twice as much carbon dioxide per unit of energy as the emission level from petrol. The same problem arises with electric cars. Although some car makers believe that electric cars will become increasingly popular, their speed, limited to 100 km/h, their autonomy, no more than about 100 km, and their relatively high price are a handicap except when an anti-pollution law is enacted, as may happen in Los Angeles, California (U.S.A.). And of course, the electricity that powers them must come from renewable energy sources!

On the other hand the electric car is the only one that is completely silent. As we saw in the June 1994 Greenwatch ("Defeating Decibels"), noise is one of the great scourges of the modern world, and automobile traffic is one of the major contributors to it. The noise heard by people living near roads comes from the engines, transmissions, tyres, horns and the road surface. Public-works contractors are trying to improve the latter. A French company has developed a system that makes it possible to reduce traffic noise by 3 to 5 decibels; this may not sound like much, but it is actually a breakthrough. Gravel is coated in asphalt in such a way as to reduce density. The result not only leads to less noise but also enables rain to drain away more quickly, making the road less slippery.

OTHER KINDS OF POLLUTION

Indispensable though they are, roads are the cause of several kinds of pollution. They contaminate water by soil erosion, which may generate between 1,000 and 10,000 tons of suspended matter per kilometre both during construction and resurfacing. Chronic pollution is caused by wear and tear on surfacing, tyres, corrosion of protection guards, road signs and rein-

The Braus pass in the South of France.

forced concrete, not to mention leaded fuel that spews heavy metals into the air that are then ingested by plants and mushrooms growing nearby. In winter, to treat icy roads, especially in the mountains, 20 to 30 grams of salts are spread per square metre (sodium-, calcium- or magnesium-chloride) that are harmful to rivers. Worst of all perhaps are the dangerous products that are spilled on the roads in accidents involving tankers carrying hydrocarbons or other chemical products that then filter into the earth and pollute the groundwater.

As Jean-Pierre Orfeuil of the French National Institute for Research into Transport and Transport Safety (INRETS) writes, "The shift of goods traffic away from the railways has created an all-powerful road-transport lobby which exploits the intensified competition and its corporate power to impose its views on society." This shift is shown by the statistics. From 1984 to 1989 road haulage traffic increased by 84% in the European Economic Community, compared with only 13% for rail freight. "Because transport in developed countries helps push up oil consumption," Jean-Pierre Orfeuil notes, "there is persisting pressure on prices, and the Third World is deprived of the development opportunities flowing from low-cost energy—opportunities which the developed world enjoyed during the post-war years." Moreover, the Third World is bogged down in economic crisis and has a hard time maintaining its roads and motor vehicles, which are often in poor shape and therefore even worse polluters.

Although scientists sometimes contest doomsday predictions of global warming and its correlation with the increased presence of carbon dioxide, a sane precautionary principle would be to reduce all pollutants emitted by motor vehicles in order to safeguard our environment now and for generations to come. A set of measures currently being studied provides for an increase in fuel consumption taxes, stricter enforcement of speed limits, a reduction in the cost of rail and public transport, the promotion of road-rail goods transport, the reduction of traffic in towns and cities and the development of cycleways. However, the users need to be won over, and this is no mean task. "Those without access to a car (the young and some of the very elderly)," writes Jean-Pierre Orfeuil, "feel themselves outsiders in an automobile-dependent society." We cannot yet know whether information campaigns, however persuasive, will convince people that raising taxes and reducing speed will guarantee cleaner air for everyone. ∎

FRANCE BEQUETTE is a Franco-American journalist specializing in environmental questions.

FURTHER READING:
☛ *Transport Policy and Global Warming*, The European Conference of Ministers of Transport, ECMT-OECD, 1993, 241 pp.
☛ *Freight Transport and the Environment*, ECMT-OECD, 1991, 172 pp.
☛ *Innovations routières pour l'environnement*, French Ministry for Equipment, Transportation and Tourism (France), 1994.
☛ *L'Environnement Magazine*, number 1529, July-August 1994.

WORLD

GOLDEN PALM TO MOROCCO

A simple but effective technique has been found for stabilizing sand dunes in southern Morocco, where cropland has been invaded by sand. In 1980, as part of a joint project carried out by the United Nations Development Programme (UNDP) and the Food and Agriculture Organization of the United Nations (FAO), farmers were advised to build enclosures of metre-high palm-branches in adjacent 7-metre squares. A considerable amount of land was reclaimed in this way. When the project ended, local people continued using this anti-desertification technique, which is viable for all of North Africa and the Near East. ∎

THE RICEMAN COMETH

The International Rice Research Institute (IRRI) in the Philippines has just announced its discovery of a new rice variety, capable of increasing harvests by 25%. Specialists at the IRRI, one of 17 centres of the International Advisory Group on Agricultural Research, studied 80 rice samples before crossing selected plants to obtain an insect- and disease-resistant variety that is also tasty and a heavy cropper. If the new rice strain lives up to expectations, it may eventually provide 100 million additional tons of rice a year. It will be put on the market in about five years. For environmental reasons, the IRRI is currently trying to produce a rice variety that will require 50% less irrigation—at present it takes some 1,900 litres of water to produce a kilo of rice. ∎

EVEN THE WORM . . .

The Bawalkar Earthworm Research Institute in Pune is one of a number of Indian organizations practising vermiculture, the culture of earthworms, for use in agriculture. It is involved in the spread of vermiculture technology for environmental protection, sustainable agriculture and wasteland development. Earthworms will consume all kinds of organic waste from factories, households and farms, and transform it into compost to maintain soil fertility. Extremely rich in protein, many earthworm species also provide a source of meal for use as livestock feed. ∎

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THE CENTRE FOR OUR COMMON FUTURE

THE phrase "Our Common Future" became widely known as the title of the report of the World Commission on Environment and Development, often referred to as the Brundtland Report, after the Commission's chairman, Gro Harlem Brundtland, Prime Minister of Norway. Widely acclaimed on its publication in 1987, the Report for the first time gave currency to the term "sustainable development" which became one of the central issues of the 1992 Earth Summit in Rio de Janeiro. In 1988, the Centre for Our Common Future, a Geneva-based charitable organization, was founded to encourage efforts worldwide to promote sustainable development and follow up other recommendations of the Brundtland Report.

Helped by a network of more than 200 Working Partner Institutions in more than 70 countries, the Centre collects information on sustainable development and distributes it to some 35,000 individuals and organizations in over 170 countries. It publishes two periodicals (free for subscribers in developing countries), *The Network*, an 8-page newsletter on sustainable development initiatives worldwide, and *The Bulletin*, a 130-page quarterly which is devoted to a main theme (e.g., the Cairo Conference on Population and Development in issue number 24, October 1994) and may also be obtained on diskette in PC 3.5", PC 5.25" or Macintosh. *The Bulletin* is a mine of information on environmental questions:

international conferences, publications, videos and radio programmes. Organizations and persons wishing to announce an environment-related event or reach a specific audience are invited to contact *The Bulletin* and be added to its mailing-list.

The Centre has also produced a remarkable booklet which presents a plain-language version of Agenda 21 and the other agreements made at Rio de Janeiro. Entitled *The Earth Summit's Agenda for Change*, it is available in English, French, Italian, Russian and Spanish. Each topic discussed is illustrated with figures and tables showing, for example, the volume of hazardous waste worldwide, the percentage of the world's population living in slums, and the degree of soil degradation.

The Centre awards six-month internships to young professionals from countries of the South, enabling them to visit Geneva, join in the Centre's work, and increase their knowledge about sustainable development. It has also compiled a catalogue of information produced by the 1992 Rio non-governmental "People's Summit", the Global Forum—175 hours of TV videotape, 5,000 photographs, 400 hours of audio tape, 350 meeting documents, a 20,000-name database and hundreds of reports, books and declarations. ∎

A NEW PUBLIC LIBRARY MANIFESTO

UNESCO, which is mandated by its Constitution to "maintain, increase and diffuse knowledge by assuring the conservation and protection of the world's inheritance of books", has always taken a close interest in public libraries. As long ago as 1949 it issued a manifesto in the form of a poster and a leaflet on *The Public Library—a living force of popular education*, proclaiming the public library to be a creation of modern democracy. As a contribution to International Book Year in 1972, the manifesto was revised to reflect a broader concept of the purpose of public libraries in the promotion of information and culture. Twenty years later, in 1992, a third version was proposed by the International Federation of Library Associations and Institutions (IFLA). Encouraging national and local governments to support public library development, the new Manifesto reaffirms that libraries should not be subject to any form of ideological, political or religious censorship or commercial pressures, and that they should be free of charge and open to everyone. It also invites libraries to encourage the development of information and computer literacy skills, to make known their objectives, and to establish networks to further co-operation at the national and international levels. Adopted in November 1994 by the representatives of 30 states belonging to the Intergovernmental Council of UNESCO's General Information Programme (GIP), the new manifesto seeks to encourage the support of local and national authorities, without which the contribution of libraries to lifelong learning and individual development may be compromised. ■

UNESCO mobilizes support for Sarajevo Library

During the night of 25 August 1992 the National and University Library of Bosnia and Herzegovina was destroyed by artillery fire from the hills surrounding the city of Sarajevo. The shells ignited a conflagration that completely destroyed the handsome, moorish-style library building and most of its collections—from 1.5 to 2 million volumes, including 700 manuscripts and early printed books and a unique collection of specialist publications on Bosnia. Less than 10 per cent of the precious collections were saved. The greatest loss was the destruction of collections of some 600 Bosnian periodicals published between the mid 19th century and the present. The destruction of the Library's central catalogues imposes a severe handicap on the reconstitution of the collections.

UNESCO has set up an International Assistance Programme to help in the reconstruction of the Sarajevo Library. "At a time when the force of arms and hatred seems to be giving way to that of reason, it is important that the intellectual and moral solidarity of humanity for which UNESCO is working should express itself vigorously," said UNESCO's Director-General, Mr. Federico Mayor, at a meeting held last April in support of the Programme. Mr. Mayor called on nations, international organizations, public and private institutions, financial bodies, associations of librarians, archivists and documentalists, as well as private individuals, to participate in the reconstruction of the Sarajevo National Library and the reconstitution of its collections through voluntary contributions in the form of funds, materials or services.

"The intellectual isolation imposed on Sarajevo is as dangerous as the shortages of electricity, water or medicines from which this shattered city is suffering," Mr. Mayor continued. "What better symbol to express solidarity and to break the isolation than a library—in this case a national and university institute? A place of teaching and research, of culture, of information and of intellectual exchange, the library furthers access to knowledge and helps to preserve cultural identity while consecrating the local community's participation in universal civilization."

The International Assistance Programme has so far enabled reading materials and office equipment to be bought. Despite the blockade, books have been arriving in small, 20-kg parcels via the airlift organized by the UN High Commissioner for Refugees and the UN Peacekeeping Forces. Librarians, archivists and members of the university are being helped to leave Sarajevo in order to attend training courses and take part in international meetings devoted to the rebuilding of the Library. UNESCO has also sent several missions to Sarajevo to establish a reconstruction programme and study the possibility of extending humanitarian assistance to the acquisition of books and scientific journals.

"I hope that contributions will be commensurate with the task involved," Mr. Mayor concluded, "and that all those who are concerned to see the universal documentary heritage preserved and to promote its widest possible utilization by researchers and general public alike will play their part in the reconstruction and equipping of the National and University Library of Bosnia and Herzegovina in Sarajevo." ■

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Salvador de Madariaga
Intuition, intelligence and the making of modern man

Text selected by Edgardo Canton

We need to strike a balance between "intuitive brilliance" and "intellectual development"; we must foster the intelligence that mobilizes all the facets of a human being (including the imagination) rather than that which reflects a compartmentalized, technocratic approach.

IF we think of an organized society with a certain continuity, a certain history and a certain tradition—such as a European nation—we find that the hierarchization that takes place throughout its history arises from two sources: firstly from practice or tradition, based on heredity and transmitted social privilege, and secondly from individual worth, which is positive in those who make their way gradually upwards and negative in those who let themselves be carried away by their natural instincts. By and large I see little point in changing this system, which has always existed and seems to me to have all the advantages.

As to natural hierarchy, I think it is very evidently characterized by a certain number of faculties, or (in less vague terms) non-physical qualities. First there are the people of spiritual worth, who are at the top of the human hierarchy. They are not at the top of the social, i.e. mechanical, hierarchy of the state, because that does not interest them. They usually withdraw from the public eye. They are the dreamers, the loners, the hermits, even if not officially.

Then there are the people I have here called the elite, those who are at the head of the state, who make up what (in a parallel with the army—which in political terms I would not accept) I would call the officers or generals of the state. They are the people who stand out because of their more highly developed intellectual qualities.

Lastly, there are the ordinary people, in whom in general (I will say in a moment what I think about this) we find above all a great wealth of intuition. I said "in general". I think it is hard to generalize. For instance, take a people like the French, who are an intellectual people. Even when a Frenchman is stupid, he is a stupid intellectual. This is very important; it is possible to be an intellectual and completely stupid. When a Frenchman is a genius he is an intelligent intellectual, but an intellectual. Among ordinary French people even the shopkeeper on the corner has his centre of gravity in the intellect. It is not the same in Spain. Spanish people are deeply intuitive, and this is something that has greatly concerned me, since it makes for great difficulty when it comes to discussing a topic such as ours today. In Spain I have often found that teaching a peasant to read is almost certain to spoil him; developing the intellectual faculties of people who have very deeply intuitive minds is a very dangerous operation. I was a student when I met Miguel de Unamuno for the first time, and I heard him say something whose wisdom has struck me more and more ever since. He said to me, "The difference between a Spanish workman and a Spanish peasant is this: a Spanish peasant has five hundred ideas and five hundred words to express them in, and every time he speaks he says something. A Spanish workman also has five

Salvador de Madariaga (1886-1978). Photo taken in 1965.

hundred ideas, but because he reads the newspapers he has five thousand words to express them in, and he never says anything." Please ponder on this great difficulty; I do so all the more humbly because I can offer you no solution.

So the distinctive feature of the elite is intelligence. Are you sure that in opening wide the door to intellectual development you are not destroying a balance? For myself, I do not know. I am not sure whether a certain energy of perception and synthesis found in human beings is not generally impoverished when it becomes intellectual and moves into an environment that is not spontaneously familiar to it. Nevertheless, despite this risk, I believe that the state's need to create an intellectual elite is such that in practice it is essential to have as perfect—or as little imperfect—a policy for primary education as possible, in order to enable all the

people to provide the state with the intellectual elite it needs.

There is another consideration. I am on the side of the individual rather than the state. Hence the interests of the state would not, for me, suffice to justify the development of primary education. There are also the interests of the individual. Among the mass of the people who in general—except for some particularly intellectual peoples like the French—stand out for their intuitive ability, there are nevertheless potentially many people whose normal existence is in the sphere of the intellect. We have no right to deprive these individuals of a chance to achieve a level to which they could naturally aspire in the state, still less the level they ought to occupy in their own lives, by denying them access to schooling.

Hence I believe that for both these reasons we must very boldly and openly

adopt a primary education policy, even at the risk, as I said just now, of a consequent impoverishment of intuition.

Having said that, we must distinguish very clearly between the culture of the greatest number and the culture of the group. These are two entirely different things, but they interpenetrate because the culture of the greatest number would be impossible to achieve without the culture of the group.

We must think of culture as an organized whole. For instance, a family must have a family culture; a state must have a state culture, and the organized humanity we are painfully trying to build must have an organized human culture.

Can this group culture be transmitted to the masses by intellectual means? I do not think so, and I believe that modern states have sorely neglected this aspect of the transmission of culture—an aspect which was never neglected during the periods of richness and unity of culture, for instance during the great periods of the Church. The Church managed to propagate Catholic culture, group culture, by the only means that are effective in reaching the masses, i.e. through mythology and symbolism. Now in my opinion, however bad mythology and bad symbolism are misused nowadays—or rather, however mythology and symbolism are misused nowadays in order to propagate a bad culture (for there can be bad culture)—we must learn to formulate, or rather to create, myths and symbols in such a way as to propagate this group culture among our peoples.

So far as I am concerned, I am convinced that if the League of Nations has so far failed (as it obviously has) to create an international atmosphere of peace and co-operation, it is because the efforts made in this direction have been directed towards intelligence, because the realm of symbols and myths has been abandoned.

These are the ideas I wanted to convey to you, because the topic you have just started to tackle is perhaps the trickiest and most difficult part of our proceedings. ∎ **47**

THE HEARTBEAT OF JAZZ

by Isabelle Leymarie

Drums, an indispensable ingredient of popular music, are the only instruments "invented" by jazz. Resulting from the juxtaposition of various percussion instruments, they have changed over the years and benefitted from several technical improvements.

When jazz appeared at the beginning of the century, the first drummers used instruments borrowed from circus orchestras, brass bands and music-hall companies. With their expressive swing styles, New Orleans drummers of today often evoke African or West Indian music, yet the drums used by their colleagues of yesteryear were not of African origin. The bass drum and the snare drum came from Europe, and other drums came from China. They were used more to impress the audience than for purely musical reasons. European- or Asian-made drums were used in classical jazz because in the United States—in contrast to the West Indies and certain Latin American countries where small drums and hand-beaten drums continued to be played despite repression— plantation owners forbade their slaves to play drums, and the instrument quickly disappeared from popular black music.

Not counting the cymbals, a drum-set consists of three sorts of drum: the bass drum, the snare drum and the tom-tom. The first bass drums used in jazz were identical to those used by brass bands, and the drummer's main task was to keep a regular beat. The drum's powerful sound enabled it to be heard over the blare of the brass. The barrel-shaped tom-toms were covered with thick pig-skin and were usually lacquered in red. Drummers also used Chinese cymbals and temple blocks (thick blocks of wood—a little like wooden gongs—played in groups of four to six). Until the First World War tom-toms, cymbals and temple blocks were imported from China and were extremely popular because of their low price. It is very likely that the immigration of large numbers of Chinese to the United States in the second half of

A jazz instrument originally used to keep the beat, the drum gradually became a solo instrument in its own right.

the nineteenth century influenced the drummers of the time as they sought new sounds.

At the end of the 1920s, with the advent of nightclubs and show business in Harlem, drums became more complicated. Sonny Greer, Duke Ellington's drummer, and Jimmy Crawford, who played for Jimmie Lunceford, added kettle-drums to their sets, more, it must be said, for show than strictly musical reasons. Perched on top of a small platform, they boomed away with gusto. When Duke Ellington played the Cotton Club, Sonny Greer used an extraordinary, custom-made drum-set that contained temple blocks, all kinds of cymbals, overhead gongs, kettledrums, a vibraphone and chimes. His mother-of-pearl drums sporting his initials were the envy of rival drummers.

A SPLASH OF CYMBALS

In the 1930s in New Orleans many drummers began decorating their drums, not only with the band's name or initials but also with attractive landscapes, the band-leader's portrait or even erotic drawings.

Drum playing gradually changed with the introduction of technological innovations and improvements. At the end of the nineteenth century Dee Dee Chandler, John Robichaux's drummer, was probably the first to add a pedal—a wooden mallet at the time—to his bass drum, which enabled him to speed up the beat. Metal pedals were soon being made on a large scale and were enthusiastically adopted by other drummers.

Cymbals, imported from Istanbul until 1929, were prized for their exotic value. They were mainly used for keeping the beat, but during the swing era musicians like Joe Jones, Count Basie's drummer, began using the Charleston (cymbals attached to the bass drum) in a much more fluid way than before. At the end of the 1960s Elvin Jones, John Coltrane's drummer, produced a continuous musical flow with his cymbals that enveloped the other musicians.

Bebop, which had appeared some years before, used bigger, heavier cymbals to help with its dizzying beat. A pioneer of this kind of music, Kenny Clarke moved the emphasis from the bass drum to the "ride" cymbal, which he played in masterly fashion using the so-called "chabada" technique. Nicknamed "Klook" because of the unpredictible rhythms he produced, Clarke produced a far more modern sound on what had become full-fledged solo instruments rather than mere metronomes.

In the late 1940s in response to increasing demand for drums, calf-skin membranes were replaced with plastic "skins" that produced a harder sound but could be produced on a large scale.

While drumming in rock and pop has kept an essentially binary, rhythm-keeping beat, drummers like Max Roach, Art Blakey, Philly Joe Jones and Tony Williams have invented rich and varied rhythms with countless accents and heady syncopation. ∎

ISABELLE LEYMARIE
is a Franco-American musicologist.

Lieh-tzu

The world turned upside down

Mr P'ang of Ch'in had a son who was clever as a child but suffered from an abnormality when he grew up. When he heard singing he thought it was weeping, when he saw white he thought it was black; fragrant smells he thought noisome, sweet tastes he thought bitter, wrong actions he thought right. Whatever came into his mind, heaven and earth, the four cardinal points, water and fire, heat and cold, he always turned upside down. A certain Mr Yang told his father:

"The gentlemen of Lu[*] have many arts and skills, perhaps they can cure him. Why not inquire among them?"

The father set out for Lu, but passing through Ch'en he came across Lao-tzu, and took the opportunity to tell him about his son's symptoms.

"How do you know that your son is abnormal?" said Lao-tzu. "Nowadays everyone in the world is deluded about right and wrong, and confused about benefit and harm; because so many people share this sickness, no one perceives that it is a sickness. Besides, one man's abnormality is not enough to overturn his family, one family's to overturn the state, one state's to overturn the world. If the whole world were abnormal, how could abnormality overturn it? Supposing the minds of everyone in the world were like your son's, then on the contrary it is you who would be abnormal. Joy and sorrow, music and beauty, smells and tastes, right and wrong, who can straighten them out? I am not even sure that these words of mine are not abnormal, let alone those of the gentlemen of Lu, who are the most abnormal of all; who are they to cure other people's abnormality? You had better go straight home instead of wasting your money."

The Book of Lieh-tzu

Translated by A.C. Graham
UNESCO COLLECTION OF REPRESENTATIVE WORKS

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[*] The Confucians.

Stepping on the gas

In the Greenwatch section of your October 1994 issue (page 41), I was surprised to read that cars powered by natural gas cause almost as much pollution as cars that run on petrol. It is true that the combustion of natural or methane gas produces nitrogen oxide, carbon monoxide and carbon dioxide, but it does so in much smaller quantities than the combustion of petrol. Moreover, by producing methane from the muck of sewage treatment plants and from plant waste, industrial waste and animal droppings, we should be killing two birds with one stone—obtaining cleaner energy and eliminating harmful waste.

Roger Paganet
Member, Friends of the Earth
Mesnil-le-Roi (France)

Reports prepared by the Organization for Economic Co-operation and Development (OECD) indicate that gas-fuelled cars emit very little carbon monoxide, but that the amounts of methane they release into the atmosphere are not negligible. According to ecologist Edward Goldsmith, 20% of global warming is due to methane. The concentration levels of methane in the atmosphere, which have doubled since pre-industrial times, grow by about 1% per annum. What's more, natural gas for private cars is still hard to find.

France Bequette

A one-sided debate?

I am interested in debate and the exchange of ideas, not in one-sided arguments. For example in your September 1994 issue (page 29) I read in Federico Mayor's "Commentary" that "The cause of the serious problems confronting so many of the countries of eastern Europe today is not freedom, but rather the burden of oppression which they had to bear for so long". And in the October 1994 issue (page 4) Bahgat Elnadi and Adel Rifaat write, "There arose other forms of contempt for human beings and other forms of exploitation of forced labour: the colonization of most non-European societies, fascist and Nazi repression, and eastern Europe's descent into totalitarianism".

By abolishing the balance that existed within international institutions, the liquidation of socialism in the former U.S.S.R. and in eastern Europe has led to the replacement of a debate of ideas arising from different viewpoints by a single way of thinking based on the dogma of capitalist ideology.

M. Champaloux
St-Gratien (France)

Facts and figures about nomads

No country has made estimates of the size of nomadic populations within their territories. Such estimates may, however, be obtained from specialists working in different parts of the world. But even they often face the problem of defining nomadism, a way of life for many societies practising very diverse forms of subsistence, e.g. animal husbandry, hunting, gathering, fishing, trade or crafts, and whose itinerant life can be attributed to a variety of ecological and economic factors.

We have contacted several such specialists and have been able to find the following estimates. These data do not include any of the thousands of groups who are nomadic (such as, for example, sea nomads, whose population is estimated at a minimum of 750,000) but do not exist on animal husbandry. Overall estimates of nomadic pastoral populations range between 30 and 40 million, broken down as follows:

North and West Africa: 10-15 million (1975)
Sudan: 2,157,302 (1983)
Somalia: 1 million (1980)
East Africa: 6 - 7 million (1975)
Jordan: 7,000 (1979)
Iraq: 250,000 (1947)
Afghanistan: 2.4 million (1960-1961)
   3.04 million (1971-1972)
Iran: 1 million (1980)
Turkey: 750,000 (currently)
Mongolia: 3 million (currently)
Siberia: 400,000 (currently)
Northern Europe: 35,000 (1981)
South America: 2.5 million (currently)

It would indeed be very useful for governments, NGOs, international organizations, policy planners and researchers to collect more such data and collate more statistics and draw up maps. As far as we are concerned, we have the trained staff for such a task but unfortunately not the resources with which to finance it.

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Respect rather than tolerance?

From a news item on page 43 of your September 1994 issue I learn that 1995 has been proclaimed Year for Tolerance by the United Nations.

Here in India, the chain of events that began in December 1992 with the mindless demolition of the Babri Masjid Mosque gave rise to unprecedented violence that reflected the ill-will and hatred that lie so close to the surface of human emotions.

The tradition and culture of this country that learnt its first lessons of *Ahimsa* (non-violence) from great masters such as Gautama Buddha, Vardhamana Mahavir and in our own times Mahatma Gandhi went to naught in the frenzy that followed the Babri Masjid incident.

As an educator and history researcher, I wonder whether the word "tolerance" indicates the correct approach to education for peace. The word carries within it an inherent sense of condescension by a dominant group over another less privileged group. The hope and the anxiety that go with the word would be better conveyed by the idea of "respect" given and received amongst individuals, communities, neighbouring states and nations. We should respect each other's way of life by learning to accept what we do not understand.

Let us declare 1995 the "Year of Respect", or better still, "co-existence".

G. Venkateswar
Bombay (India)