NORTH IS NORTH, AND SOUTH IS SOUTH,
AND I-WAYS MAY LET THEM MEET

By Hermann Steffen

1994

You're in your comfortable fortified townhouse, which you hardly ever leave. Why should you? You work at home, and have a fiber-optic and satellite connection to your company headquarters -- and to everything else you can think of. So does your current life-partner, whose children attend a very exclusive international virtual school based in Switzerland or Costa Rica, you're not sure which. You have access to 500 interactive multisensory channels that your digital agents have selected for you. Thanks to AppleSoft WindowSystem 9/99 HyperOLE, you can CPM (cut, paste and modify) between channels: remember how much fun you had last night when you morphmerged Casablanca with those cute home-movies from when you were six? You teleconference with all your friends, and virtual vacations mean that you can visit the Himalayas and still enjoy a good night's sleep in your own intelli-bed. You shop at home, naturally, and all of your purchases are delivered by an armoured teledriven truck that latches directly onto your robo-gate. You're thinking of what to order for tonight's dinner -- perhaps some mezquite-grilled tepezcuintle washed down with a nice South African riesling -- when you hear an ominous click. It's your front door opening, a sound you have not heard in two and a half years, since the district's border-control system crashed for five days and the homeless wetback boatpeople problem got out of hand....

** COSTA RICA

We'll get back to this nightmare -- if you so wish. But first let me tell you a bit about Costa Rica, the country I come from. It has 3.2 million inhabitants, and a territory of only 51,000 square kilometres. Its main foreign-income earners until recently were coffee and bananas, but now tourism is number one. One reason is that Costa Rica is only 300 kilometres wide at its widest point, yet it has coasts on both the Pacific and the Caribbean. The beaches are pretty nice, too.

Another reason is that Costa Rica has 5 per cent of all the world's biodiversity. 25 per cent of the territory has been converted into national parks and other kinds of conservation areas; tourists from the U.S., Canada and Europe love to visit these areas and see the 1.100 varieties of orchids, the 850 species of birds, the iguanas and howler monkeys. Something else that has attracted people to our country is that in 1987 then-President Oscar Arias was awarded the Nobel peace prize for his successful Central American peace plan. Mr. Arias, aside from his own personal merits, was following in the steps of fellow Costa Ricans who in 1949 abolished the army, and others who further back, in 1882, abolished the death penalty and 13 years earlier established free, compulsory education.

** DIGITAL COSTA RICA

If all this seems irrelevant to the subject of this panel, think of it as a rest-stop. I will now attempt to get back onto the Infobahn by describing the experiences Costa Rica has had in trying to build its own digital roads.

Guy de Téramond is the father of the Internet in Costa Rica. He claims our country is the second in Latin America in per capita Internet nodes: 1.0000 by the end of 1994. (The first country is Chile.) And the growth rate has remained fairly steady, he says, at a quarterly 30 to 40 percent. This is remarkable, considering that it was only on January 26, 1993, that Costa Rica had its first Internet node, and that the country is as bureaucratic and slow-paced as any in the tropics.

** THE SUPERTRILLO

And what of the future? The e-crowd is devoting a lot of time to discussing native information superhighways, although the term now used is the *supertrillo*. This translates roughly as the "supertrail , although this translation leaves something out. A trail in English suggests a carefully tended path rich and middle-class people explore for recreation, in designer outdoors gear, through manicured national parks. In Costa Rica, with its still strong agrarian traditions, it refers to those barely perceptible paths, etched by bare feet on the forest soil, that lead from the adobe or wooden hut of peasant Juan to that of peasant José on the other side of the mountain.

As you can see, Costa Ricans detest solemnity, and yet the recently issued National Science and Technology Plan aspires to turn our country into a "world class information capital , especially in the field of sustainable development and nature conservancy. A preposterous thought, apparently, but then you run across these paragraphs in William Gibson's *Virtual Light:*

> "You ever been to Costa Rica, Rydell?
>
> "No.
>
> "It's fucking beautiful, man. Like Switzerland.
>
> "Never been there.
>
> "No, I mean what they do with data. Like the Swiss, what they did with money.
>
> "You mean the havens?
>
> "You got it. Those people smart. No army, navy, air force, just neutral. And they   take care of everybody's data.
>
> "Regardless of what it is.
>
> "Hey, fucking 'A'. Smart people. And spend that money on *ecology*, man. [1]

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[1] 64, 65.

** NORTH AND SOUTH

All very well, you say, but what of the cyberspace road hazards we were supposed to talk about? One image comes to mind: that of those bridges collapsing during the Los Angeles quake. One of the reasons Costa Rica has such rich biodiversity is that it is a land-bridge between North and South America. It is also, in many ways, a bridge between North and South: a country that, judged by the UNDP Human Development Report, would seem to be doing reasonably well; but one that is still part of the Third World, a place where one third of the people live below the poverty line. And that, although it may not be immediately obvious, has something to do with the information superhighway.

I will clarify this by describing, not the Costa Rican experience, but that of Central America as a whole. It was only less than a year ago, in late february 1994, that another Central American country aside from Costa Rica hooked up to the Internet: Nicaragua. It did so through CRNet, what we might call the "Costa Rican Internet . (This was the first time ever, incidentally, that two Latin American countries established a direct Internet connection between each other, instead of going through the U.S.) Before that, Central America had to make do with two primitive UUCP networks: Huracán and Nicarao. And I will tell you the sad story of Nicarao, now more off-line than on.

** NICARAO

Nicarao wasn't too bad a network by Third World standards. Run by the then head-office of the Regional Centre for Economic and Social Research (CRIES), it was one of 15 non-profit APC networks worldwide, such as GreenNet and PeaceNet. One could dial up anywhere in Central America, and when it wasn't down due to power cuts in Nicaragua one could exchange e-mail with other members and check out APC "conferences , or newsgroups, on such issues as peace in Central America, the Haiti crisis or the environmentally correct use of technology. Then one day users received this message:

From ayuda Mon Jun 13 12:55 PST 1994

To: us1 us10 us2 us3 us4 us5 us6 us7 us8 us9

Subject: INFORMACION DE NICARAO

Cc: angela ayuda lucia marthasilvia patricia sflores

Status: R

Managua, 13 June 1994.

Dear Users:

With profound grief we inform you of the decision by the Directorate of CRIES-Nicaragua [...] to close down this institution [CRIES-Nicaragua], in which the Nicarao node is immersed.

The staff of Nicarao are profoundly concerned about the future of this important communications tool at the service of civil society, since we still have not been informed whether it will carry on or not, as the termination of the work contracts of ALL CRIES-Nicaragua staff members has been requested.

However, we are making every possible effort to ensure that Nicarao survive, since its shutting down would mean an unprecedented step backwards both at the national and international level.

CRIES management argued that the institution had grown too large and cumbersome, that it was providing too few services and these mostly in Nicaragua, even though it was a regional organization. This was especially unfortunate at a time when foreign funding was drying up. The fired workers say that the crisis was already past, that some funding had trickled in, that the workers were aware of the need for more efficiency and had some proposals towards that end but management never gave them a chance to put them into effect. Be that as it may, Nicarao was far too visible to allow it to disappear with the rest of the organization, so with UNDP help it was handed over to the National Sustainable Development Network of Nicaragua -- but only after countless users had deserted it.

What I want to stress is what a typically Third World situation we're looking at here. A network is set up in Central America when the region is *chic*: a communist threat to national security according to the Republicans in the States; a romantic revolution that imperialism was trying to crush, according to liberals. And then charges of mismanagement and inefficiency, all culminating with the drying up of funds as soon as war is over and the Berlin Wall is history.

Meanwhile, in the region, the infrastructure is still disgraceful, corruption is rampant, the majority are poor, and education and health services remain dismally inadequate. Given these facts, one should not expect the Inter-American Information Highway to have much traffic. And similar conditions are to be found in many countries in Africa and Asia, not to mention the South within the North: the inner cities.

** WHY GIVE A DAMN?

But why, you say, should you give a damn about all this? It's all very sad, of course; but we are here to discuss the most exciting technological advances since the printing press and the industrial revolution. What if there should be information haves and have-nots? Hasn't that always been the case, whether the valued commodity was land or machinery or knowledge?

I will not give you any ponderous ethical arguments, because you are all here to enjoy yourselves and make some good deals. And when you leave you will go back to your neighbourhood and family and you will be mainly concerned about their welfare and yours. The question is, what will ensure your welfare and that of your children?

People used to believe that the world was made up of things, which affect each other in a linear manner: billiard ball A hits billiard ball B, thereby transferring some energy to billiard ball B. We had no reason to expect anything to happen back to ball A from this description; and

we thought this was true of everything. If I chopped down a tree, it was thing A (myself) chopping down thing B (the tree): and unless I was incredibly inept I had no reason to expect my actions to get back at me, say in the form of being crushed down by the falling trunk.

Given the world of separate *things* in which we found ourselves immersed, it seemed only logical that we should conquer Nature. But the notion of conquest has a different ring to people from the Third World; in Latin America, for instance, we know that conquest 500 years ago by Spain meant genocide and pillage and rape: and we see the same with Mother Nature, raped and robbed: in Bacon's phrase, *Natura vexata*.

** BATESON

Ecology has shown us why the world is in such a mess, why there is a hole in the ozone layer, the sea level is rising, people in Mexico City are dying from the pollution and maple trees in Canada are dying due to acid rain. We are dealing with a complex *system*; we are dealing with *relationships*, not separate *things*.

Gregory Bateson spent his entire career looking at relationships, at patterns. He described what happens when you think in terms of separate things. Remember DDT? I quote:

> If you use DDT to kill insects, you may succeed in reducing the insect population so far that the insectivores will starve. You will then have to use more DDT than before to kill the insects which the birds no longer eat. More probably, you will kill off the birds in the first round when they eat the poisoned insects. If the DDT kills off the dogs, you will have to have more police to keep down the burglars. The burglars will become better armed and more cunning ... and so on.[1]

As the reference to burglars suggest, it is not just a question of saving the whales. These concepts, derived from cybernetics, apply to any system: they apply to our biosphere, but also to local ecosystems, to individual species within that ecosystem, and to individuals of those and other species, who are made up of organs and organelles and molecules. What I am trying to say is that you cannot apply ecological thinking only to Mother Nature; or rather that we, as the only species of verbal mammals, cannot set ourselves apart from each other: we're part of an interlocking series of sociosystems.

** SOCIOECOLOGICAL DISASTERS

I will give you a few examples of socioecological disasters. You go to another continent and capture a lot of other verbal mammals -- conveniently of a different colour -- and then put them to work for you. No salary, no formal education, no health services or decent housing. Eventually, with some pressure from those bastards in the North, you give them their freedom. But that is not systemic thinking: people do not just require, as Flaubert put it, the right of rich

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[1]146.

and poor alike to sleep under bridges. They need decent salaries and education and health services and housing. If you do not give them the means to achieve that, their own sociosystem breaks down, and then it's teenage pregnancies, drug crimes, metal detectors in schools, and the like. Does that leave the whites unharmed and unaffected? No, because they're not separate: they are all part of a larger system. At best, you can apply a tourniquet to the wound. But unless you heal the wound you are exposed to the dangers of gangrene. You can always amputate, of course; but it will cost you an arm or a leg.

Isolationism, international or national, doesn't work. It's based on a false premise: the belief that you can be separate. Take the case of Costa Rica. It would appear that we have done all the right things in terms of social programmes. But because the world does not end at our borders, we have masses of illegal immigrants from Nicaragua.

Isolationism works even less well internally. In the late 1970s, while the oil crisis was going on, the country went through a major recession. Unfortunately, at the same time, a few kids were doing quite well -- the children of government officials, of some industrialists -- and they were doing something that was uncharacteristic for the upper class in Costa Rica: they were showing off. We're talking conspicuous consumption here. You could say they were just following the example of American television. But everyone else in the country was also watching them *and* watching television, including the poor: soap operas are a great opiate. And those who were poor didn't just feel poor because they had to struggle to earn their daily bread; they felt doubly wretched because they knew that they would never be able to afford all the stuff they saw advertised on television or being shown off by the rich kids: the fancy clothes, the fancy toys, the holidays in Florida.

I don't think it was entirely a coincidence that about that time the crime rate -- specifically, break-ins -- reached epidemic proportions. And then the middle class put bars on their windows. San José looks like row after row of privatised bed-and-breakfast jails: every house has bars in the windows, some quite aesthetic. But did this change matters? Criminals have become more cunning, better armed, deadlier.

Do I sound a bit schizophrenic in describing my country? Only because the map is not the territory, and I have been showing you different maps. Costa Rica is all that I have said and more, and this reflects the current state not just of our system but also of the global ecosphere and sociosphere.

So what does that mean to people in Europe and Japan and North America? Just as non-linear dynamics proposes that a butterfly fluttering its wings in China may contribute to the development of a thunderstorm elsewhere, you cannot remain isolated from what is going on in the Third World, or in your own inner cities. If you build the information superhighway, that will just be one additional way for the barbarians to get in.

** OMAR DENGO FOUNDATION

What can be done, then, to ensure that the building of the infoway does not lead to a greater social gap and socioecological disasters? Among the many institutions connected to the Internet in Costa Rica there is one that stands out: the Omar Dengo Foundation. It was created to promote computer literacy, especially among school-children.

It runs a Costa Rican Schools Telematics Network, which covers over a hundred schools, with the full and I hope sincere commitment from the new government to expand it to every State-run school in the country. These schools are connected to each other through the foundation's central node, and they are fully connected as well through that node to the Internet.

Clotilde Fonseca, until recently the executive director of the Foundation, tells of wonderful projects in recent years linking Costa Rican children with those of schools in countries like the U.S. and Canada. One example: the children in Los Corales school in Limón, on the Caribbean, linked up with those of Marshview Middle School in Sackville, New Brunswick. While that project was going on in 1992, an earthquake wrecked the Limón area, including the school we're talking about. The Canadian kids were moved by the plight of their on-line friends, and hey organized a special Costa Rica Day to encourage donations for the repair of the Los Corales school. It was a place they had only visited virtually.

The Costa Rican schools served by the network are not exactly upper-class, as this anecdote suggests. In fact, the project concentrates on rural areas and marginal urban areas. There are even special programmes for street children. The programme is still relatively new; but I would hazard a guess that the future will look much brighter for these kids now that they have a chance not to be street children but highway children: information highway children, that is.

** AN ADDITIONAL ECOFACT

Let me just discuss one additional ecological fact. As Bateson pointed out, Darwin was right in saying that it is the fittest who survive, but he was wrong about the basic unit of survival: it is not the species, but the species *in its environment* -- which is why we are in such deep trouble after having raped and pillaged our environment for so long.

The problem is not just one of population, of more people and therefore more raping and pillaging. Consumption is also an issue. There have been many studies, but I will only quote one. It was carried out on behalf of the Costa Rican-based Earth Council and presented at the population and development conference in Cairo. The paper showed that, for all practical purposes, the United States has a much greater population than China. On the basis of the contrast between the amount of calories needed for subsistence and the actual consumption of all forms of energy, for manufacturing and everything else, U.S. citizens consume as much as if they were almost 23 billion strong. People in the South have to reproduce less, but people in the North have to consume less.

Does that sound like heresy in a conference such as this, where after all everyone wants to come up with something the market will devour? Not necessarily.

Our whole market system heretofore has been based on people buying *things*. As long as demand is strong, there will be high employment and good profits. (Never mind that, systemically speaking, when you become more competitive by automating everything and can therefore restructure and cut your staff in half, and everyone else is doing the same, suddenly half your consumers are unemployed and cannot afford your products, and therefore require your tax dollars in unemployment insurance and welfare to become moderately good consumers again.)

But we don't really want *things:* we want *experiences*. At a subsistence level, sure, you want food and shelter, and it doesn't matter if the food or the bed are lumpy. Beyond that, people want an *experience:* you don't really want those expensive jeans, you want the experience of wearing those jeans because it leads to the experience of people flirting with you or thinking you must be rich enough to afford them, preferably both. And you want to *own* those jeans, not because you want one more thing to put into that thing called your walk-in closet, but because you want the experience-of-wearing-those-jeans to be reliable. It's called clothing on demand. Meanwhile, the world's resources are becoming more and more depleted.

** EXPERIENCE CONSUMERISM

Is there any good news in this for people in multimedia and the Infobahn? Yes. Because what you in the industry provide are experiences, with a relatively low impact on non-renewable resources. When we get beyond this primitive stage of CD-ROMs and all multimedia is online, people will have the experience of having all the facts and all the fun at their fingertips without needing to wipe out entire forests to provide the world with thermal paper and newsprint, and without resource-intensive packaging. People won't have to lead austere lives: their lives will be rich in experiences, and with less cluttered closets.

** THE NIGHTMARE REVISITED

But what happens if you embrace this vision only partially, feel proud to be contributing to a less resource-intensive capitalism, and yet you disregard the fate of people in Nicaragua, Somalia and Detroit? What happens if you apply the "separatist notion that you're in the multimedia business and not in the other-people-and-life-on-this-planet-in-general business?

You're in your comfortable fortified townhouse, which you hardly ever leave. Why should you? You work at home, and have a fiber-optic connection to your company headquarters -- and to everything else you can think of. You shop at home, and all of your purchases are delivered by an armoured teledriven truck that latches directly onto your robo-gate. You're thinking of what to order for tonight's dinner, when you hear an ominous click. It's your front door opening, a sound you have not heard in two and a half years....

And then, behold, a horde of barbarians rushing up the stairs, into your living room, into your bedrooms. Some hacker from the huddled hungry masses down below has cracked the code to your electronic home-defense system by Peace of Mind Inc., and here they are -- greasy, smelly, wild-haired, speaking in Spanish, in Arabic, in Swahili, groping at your incredible electronic equipment, smelling and tasting the curtains, taking away the authentic faux-wood chairs for firewood, playing with the toilet paper, trying to eat the tropical fish in your virtualarium, and taking you and your life-partner and children with them. No offence meant, they seem to grunt, but they happen to suffer from this severe protein deficiency....