

PARADISO AND HACK-TIC PRESENT

The Galactic Hacker Party & ICATA '89

Paradiso
Weteringschans 6-8
1017 SG Amsterdam
The Netherlands

tel +31 20 264521
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In co-operation with:

2600 Magazine, New York
Terminal / CIII, Paris
Chaos Computer Club

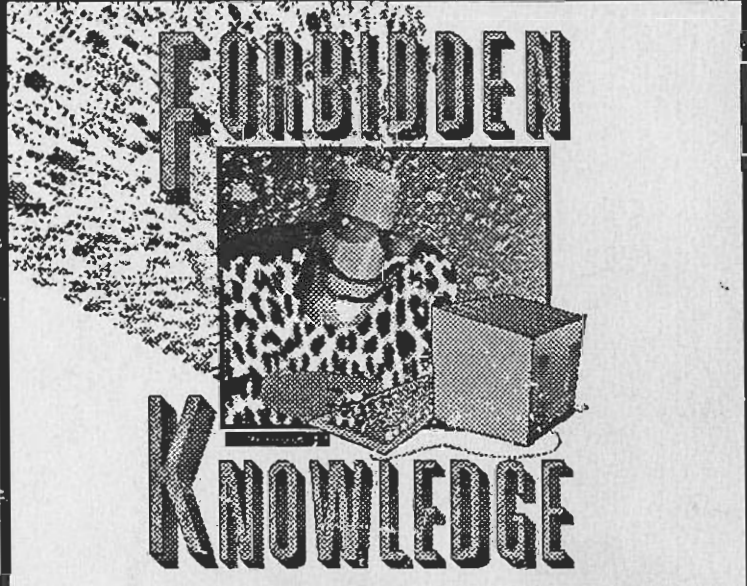
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Acorn Econet LAN with
Archimedes micros supplied by:
E.C.D. computers Delft
E.C.G. Netherlands

Ethernet around SUN 350
running UNIX with ATARI ST and
Apple Macintosh computers as
terminals

Lots of visitor-supplied equipment
(bring yours!)

In association with:



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KNOWLEDGE**

IN A TECHNOLOGICAL SOCIETY

A FORUM FOR DISCUSSION OF HACKER ETHICS
ORGANIZED BY LEE FELSENSTEIN AND STEVE SAWYER

OCTOBER 15, 1989
HUMANIST HALL
390 27th STREET
between Webster and Telegraph
OAKLAND, CALIFORNIA
doors open 4:30 P.M.
meeting begins at 5:00 P.M.
\$5.00 donation requested / open to the public
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Paradiso and Hack-Tic present:

THE GALACTIC HACKER PARTY

&

ICATA'89

International Conference on the Alternative use of Technology in Amsterdam

2nd, 3rd and 4th of August 1989

Paradiso, Amsterdam

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Entry:

day ticket	f 10,-
3 days pass	f 25,-
Hack-Tic subscr.	f 20,-
Corporate fee	f 100,-

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WEDNESDAY

August 2nd, 1989

"To byte or not to byte"

The relationship between "man" and machine

FORUM / DEBATE

Guests: **John Draper,**
alias **Captain Crunch**

Lee Felsenstein

WORKSHOPS:

Citizen networks **S. Wernéry**

Ecology & Computer **T. Wams**

Is A.I. the future
evolutional design of
humanity? **R. Snijders**

Computer Virusses **A. Lundall**
B. Fix

Evening: Editing committee compiles
the day's abstracts

10.00 **Zero hour of GHP / ICATA'89**

11.00 Captain Crunch opens network
links with other nodes (Ger-
many, USA, New Zealand, Fran-
ce)

11.45 Lee Felsenstein : **The compute
as a tool for democracy**

12.30 **Chat with Moscow**

14.00 **Network Demonstrations:**

- NEABBS
- Peacenet
- Green-net
- De Zwarte Ster
- The Well - USA
- GRID
- SURFnet
- EARN
- UUCP
- BITnet
- MINITEL - Alter-France (Mini-
tel)

14.00 Workshops

16.00 Debate on **Community Memor**
with Lee Felsenstein & **Prof. Ge-
rard de Zeeuw**

20.00 **Film: "Brazil"**
• (Terry Gilliam, 1985)

The "Pan-Galactic Gargleblaster" will be served

THURSDAY

August 3rd, 1989

"The hacker in the lion's den"
On \$\$, secrets & the right to information

FORUM / DEBATE

Guests:

Wau Holland
&
Pengo (Hans Hübner)

WORKSHOPS:

Security issues and intelligence services
S. Wernéry

Repression & Prosecution of
hackers and phone phreaks
Captain Crunch

Hackers in the Hospital Information System
Daniel de Roulet

Hacker press: Hack-Tic, 2600, Datenschleuder &
terminal

Evening: Editing committee compiles
the days abstracts

Select committee prepares
draft for the ICATA'89 final
declaration

10.00 Previous day's abstracts +
comments & messages from
nodes are presented

11.00 Captain Crunch:
The Soviet telephone system

12.00 Debate between Wau Holland
and Pengo on **Hacker-Ethics**

14.00 Debate: **Information under and
as a threat**

Moderator: **Marieke Nelissen**

Participants:

-**Peter Klerks** on Privacy versus
Computer
-**Zwarte ster** on Bulletin Boards
-**Werner Pieper** on Sabotage
-**Suzan Ugursoy** on Naziware
(Chip Generation / Turkish Byte)

14.00 Workshops

16.00 Political debate: **The breach of
computer-peace**. Groen Links in-
vites other Dutch Political parties:
PvdA, CDA, VVD, D'66

17.00 Book presentation by Ravijn Pub-
lishers: **Bolo'Bolo**, by **P.M.** (Swit-
zerland)

20.00 **GAME NIGHT**

Multi-user games, adventures etc.
etc. within Paradiso and far
beyond
Please bring your own games as
well

FRIDAY

August 4th, 1989

"The future behind the computer"
The illusion of "The global information village"

FORUM / DEBATE:

Guests (all on-line from Nairobi):

Prof. Cees Hamelink

Dr. Kwame BOAFO

and students

Moderator: **Patrice Riemens**

WORKSHOPS:

Cyberpunk Bilwet & Lee Felsenstein

Final drafting of the ICATA'89 declaration .

Extras:

ARTburo HÆVFTIES video deformation

BILWET's metarealistic manifesto
Created through multi-user writing

10.00 Previous day's abstracts
comments & messages from the
other nodes

11.00 **Link with Nairobi**

to: the African Council on Com-
munication Education & the Un-
iversity of Nairobi

on: Freedom of information
Overflow of information
Balanced flow of informati
Computer literacy

14.00 Free chat on **Hacking & Busi-
ness** and the sponsoring of
information

14.00 Workshops

16.00 **ICATA'89 Declaration adopted**

17.30 **Presentation of Hack-Tic No 5**

22.00 **Party at the end
of the universe**

- First DTP-ed copies of proceedings ICATA'89 presented
- **Velibor Weller**
- **Rock 'n Roll: Cross your heart and the Playtex**

FOREWORD

It must have been on the road between Osnabruck and Enschede that we decided to go for it. Very tired and full of impressions, we were on our way home after having attended the Chaos Computer Congress in Hamburg. It was the day before New Years Eve, 1989. We were turning ideas and words upside down in the car to formulate the concept and find the name under which we were going to work the coming half year.

In the Netherlands there is no law against computer hacking. Because in most countries now hackers are a hunted species, we intended to use the possibility of being able to invite hackers to unite in Amsterdam, without them having to face any prosecution. In Hamburg we looked for and found inspiration.

We decided that we would make two events happen at the same time, in the same building: The Galactic Hacker Party and ICATA'89 (International Conference on the Alternative use of Technology in Amsterdam). Through combining these audiences, we assumed that the overall effect of those three days in August could be more intense: philosophers having to confront real possibilities and frontiers of technology and hackers realizing that their deeds do affect the way society and history develop. By emphasizing the culture that is created through the existence of the hackerdream, we could both make ourselves an environment that is full of rumours and undefined ideas, as well as a meeting point for people living in very diverse parts of the world, all using technology to realize their wishes and convictions in this life. For us the hackerdream concerns the freedom to invent, the right to know and the need to act.

Back in Amsterdam we started off: Rop Gonggrijp, Patrice Riemens and myself made the first rough drafts of the program, planned our budget and sent messages over the networks to get in touch with other people interested in our idea. It soon appeared that organizing a conference like this only through computers is not possible. One needs to know people and a telephone and fax-machine can be very useful

So we met in Koln with people of the Chaos Computer Club, in Paris with people from Terminal and the UNESCO, we spoke with Lee Felsenstein, John Draper and 2600 over the phone, Prof. de Zeeuw and Prof. Hamelink from the University of Amsterdam were cooperating and finally, just a week before we would open, Michael Polman from INTERDOC rang the bell in Paradiso. Well aware of the monopoly the first world has in computer technology we gave ourselves a lot of trouble to create a "More Balanced Flow of Information" as UNESCO once named it. Despite the international telephone system we did succeed in making connections with Moscow, Nairobi, South Africa, Brazil, Uruguay and Wellington (NZ). Their contribution appeared to be vital for an understanding of what computer technology might have changed or will change in our world. Both hackers and people in third world countries are confronted with the power structures in which technology is organized. That is what makes the debate interesting.

During the last weeks before we opened more and more people were giving their precious time to the GHP/ICATA'89. Especially the twenty persons who just came walking in (they had heard something and wondered whether they could be of any help) and put together the whole technical hardware and software structure in the building--they should be honoured here.

A project like this is a culmination of improvisations. It works because many people feel the need to make a statement at the same particular time and above all amuse themselves. The fact that Paradiso, a cultural centre and music hall in the center of Amsterdam, supported this project increased the possibilities we had and the risks we could take.

Finally, we had those three astonishing days. Hereby we present you the proceedings that were written during the GHP/ICATA'89 by the "editgroup", and edited afterwards by Patrice Riemens.

We hope you, the reader, can gain an impression of what happened here in Paradiso in the summer in 1989. We know that the public debate will not stop here, and that during the Hackers Conference (USA, October 1989) more comments will be made on this text. Comments will be made public so that at the Chaos Computer Congress next December in Hamburg the discussion can continue.

Amsterdam, 5 October 1989

Caroline Nevejan

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THE GALACTIC HACKER PARTY & ICATA'89.

- EDITOR'S INTRODUCTION -

For three jam-packed days in August 1989, the Amsterdam cultural centre Paradiso was the scene of the Galactic Hackers Party and of the International Conference on the alternative Use of (High-) Technology (ICATA). For the first time, computer hackers from many countries, whose activities have massively, if not very adequately, caught the imagination of the media in recent times, came to the open on a large scale. They were prepared to discuss with a broad public the practical and moral issues of hacking, this against the background of the ever growing place of computers in to-day's world. As it becomes clear that the "information society" is not a unmitigated blessing, there is a need for concerned computer specialists to act as a watch-dog body, inform the public objectively and enable the society at large to act in consequence. In this evolution towards an "informed society", hackers, through their gifts, knowledge, position and dynamism can make an unique contribution. The Galactic Hacker Party and ICATA'89 was meant to explore and tap this potential and the following proceedings intend to reflect what has been achieved, or rather, initiated, on this score. A word of warning, though: much more has happened than possibly could be reported, and as was pointed out by many participants and contributors, it has been the informal exchanges and the opportunity to meet fellow souls in the first place, that left the most lasting impression. This is of course the aim, if not the outcome of all conferences, and might be taken as an indication of this one's success.

The following proceedings are divided into five parts. Part I & II contain the actual proceedings of the conference, viz reports of scheduled activities and supporting texts. Part I provides news and impressions on fora, debates and workshops gathered by the GHP/ICATA editing group, plus transcripts of the two most important debates at the conference. Part II is made up of short pieces written by speakers at fora or workshops who bear immediate relevance to their contribution. The ICATA declaration, contributions and statements by various individuals and groups and a few related texts are found in part III. A number of more substantial papers which have been submitted and/or presented at the ICATA, form part IV. Finally, a number of miscellaneous pieces, such as messages to the conference, logs of in-building computer (small-)talk, etc. have been gathered in the annexes, or part V. Though English was the working language at the GHP/ICATA, most texts have been edited, and a few contributions in German or Dutch and had either to be translated or remain as such.

The thematic arrangement of the ICATA/GHP whereby each day carried a logo (Wednesday - "To Byte or not to Byte"; Thursday - "The hacker in the Lion's Den"; Friday - "The Future behind the Computer") has provided the backbone of these proceedings as well, and part I & II, i.e. the (f)actual reporting is arranged accordingly. This makes up for a presentation which is both chronologically and topically consistent, but requires the reader to familiarise her/him self with the programme of the conference on the opening pages (together with a short identification of our participants/contributors).

Patrice Riemens.

PART I REPORTS OF ACTIVITIES

WEDNESDAY, 2 AUGUST 1989

"TO BYTE OR NOT TO BYTE"

Though the Conference opened to-day, a growing number of people had been active in Paradiso for the past couple of weeks, culminating in a frenzied bout of round-the-clock activity to put the huge amount of supporting technical apparatus together. For nights on end, the pop music centre was transformed in factory hall where dozens of feverish hands put cables, plugs, and other electronic fixtures together. Meanwhile, in the cellar (soon to be called the U-Boot - submarine), technician and sysops were piecing the central operating system together, competing for space with a weirdishly dressed, but stachanovistically hard working gang known as the ARTburo Haevties...

No wonder may be that a few programming glitches were made, which in such surroundings could not escape attention of the eager public: an impression:

The First Hack by Bernd Fix

The first visitors of the Galactic Hacker party had just entered the building when the sysops of the SUN-UNIX-LAN were confronted with an unpleasant surprise by some kind of hacker - no, not a true hacker because sHe shut down the whole system by deleting important files either by accident or purpose. Hey folx - what's going on here?! Hackers do not destroy or mess with data or exclude other people form using computers systems - dictators do this kind of shit. Hackers use their knowledge to encourage or render other people able to use computer systems for communication and free exchange of information.

Eventually, the system was hacked into and went down again one more time. Some people become very angry about that, finding it a perfect illustration of the dilemmas set forth in the hacker ethic, but our sysops took (fortunately for him!) a more relaxed attitude:

The operator (...)took it in the spirit of the conference; (he) said such experiences always teach an operator important lessons. "we were tired when we set up the system, we made a couple of mistakes. But I won't make the same mistakes again.(...)"What do you expect at a hackers conference?"

(from the article in The Wall Street Journal, Aug. 7, 1989)

So on Wednesday at 10.00, Paradiso had opened its doors. A first impression:

Wednesday, 10.45 am, opening of the conference.

Paradiso has just officially opened its doors. The crowd is coming in. Some people head directly to the terminals that are scattered everywhere in the building, while others head for the coffee-shop in hoping to speed up the process of waking up.

Paradiso is crowded with Press. Most obvious are the television-camera. They are all fixed on the "cockpit" which is located in the middle of the main hall. Here Captain Crunch (John Draper) is trying to make contact with Moscow to start a conversation on Computers and democracy. The Press is nervously watching the screen, to find out if anything "secret" is happening.

Meanwhile on the other terminals a world-wide chat between hackers is already going on (a good example of Computer-democracy) (or is it the "hands-on imperative?"). That is the way of hackers! We don't have to wait for the official program to start! Excerpts from the logfiles:

A Hi there

B : Hi A A: r u in Switzerland or in Paradiso?.

B: I am in Paradiso where r u.?

A: I am also in Paradiso B: which terminal do u use? (it turns out that they are sitting next to each other!)

Fortunately, our New Zealanders have connected too, they quip:

3 guesses where we are!

Another report had this to say:

At 10.15 the doors were opened for the Galactic Hacking Party and people came streaming in out of the rain. Some people were here to learn more about hacking; some to learn more over networks, and some others out of sheer curiosity. One person was very vague about his intentions, but in the end he turned out to be a security official from a large Dutch bank

Around 10.30 the main hall was filling up: the terminals were crowded, the "cockpit" surrounded by many people and television camera's, front seats occupied for the opening."ceremony".

This was done by none less "person" than Max Headroom himself! He appeared on the giant screen in a redubbed version, and was quickly off "to get on line somewhere"...

Then it was John Draper, aka Captain Crunch's turn to handle a few switches (in fact it was considerably more complicated than that!) and open the network to other nodes, in Hamburg, Paris, the USA and New Zealand. Paris proved beyond reach, but all other nodes responded well

At 11.45 Lee Felsenstein, our other main guest from the U.S. held his address on "The computer as a tool for democracy". Read his supporting text is in part II , here a report:

"Computers as a tool for Democracy" - Lee Felsenstein.

Plato said that philosophers have to rule the world, but Lee Felsenstein apparently prefers responsible technocrats, or "technos", as he calls them. Old style technocrats can also become technos, provided they become more concerned about things that really matter. They must be willing to work for a new free world , a global community, instead of losing themselves in technicalities and serving the wrong masters.

Lee has "crunched" Plato's view of 2000 years ago, and says: nice people those philosophers, but they even can not make a radio-transmitter. Lee therefore wants the power to go to his new brand of technos. Socially cooperative and responsible technos would use use their knowledge for the benefit of all and help to build a better world, instead of keeping a small economic elite in power.

At 12.30 John Draper made contact with Moscow via the links provided through the "San Francisco-Moscow Teleport". Hackers being thin on the ground in the USSR, or at least not very much coming to the open, our opposite numbers in Moscow turned out to be computer scientists of academic standing. Their questions were framed accordingly and were somewhat baffling to our audience:

"The Russians, largely from academic research stations, wanted specific information on computer applications. Sergei Cosmo wanted to know about object-oriented programming and 3D graphics.(...) The West's finest hackers have different questions: 'Do the Soviet think of themselves as part of the global village of computer networks?(...)Is there use of computers by private citizens and how easy is it to obtain them?"

(from The Manchester Guardian, 4 aug.1989)

Moscow remained somewhat vague on this issue, but everyone got the feeling of a beginning of glasnost & perestroika in the computer-field too. Next day John draper would expand more on the subject of Soviet telephone and computer systems.

The afternoon session was devoted to workshops on one side and a big demonstration of networks, e-mail systems and electronic bulletin boards on the other. Reports on the latter:

DEMONSTRATION OF INTERNATIONAL AND DUTCH NETWORKS

Michael Polman (ANTENNA)

Jeremy Mortimer (Greenet)

Tjebbe van Tijen (Library of the University of Amsterdam)

Xytha (BBS De Zwarte Ster)

by Gert de Bruljne

If you want to know details on the USS IOWA warship, log into Greenet and you will be able to track down this battle-machine cruising on the North Atlantic. Information on the explosives on board, previous accidents of the ship etc. are also available. This just one example of what you may find on international networks like Greenet en Geonet.

These international networks are used by thousands of small and large organisations concerned with issues like environment, human rights violations, development aid, peace research etc. They up load these databank/communication networks with information vital for progressive groups struggling for a different world.

Is this information for alternative groups and people only? Certainly not. The information on these networks is freely accessible to everybody. The networks can also be used for fast communication between users/subscribers.

Using the good old Dutch post office telecoms, Jeremy Mortimer of Greenet made contact with his network. Explaining how simple it is for organisations to make contact by sending messages to the Greenet mailbox, where the receiver(s) can pick up the 'letter' anytime they like and respond immediately. Then he gave a demonstration of the conference board system. On various topics, organizations and individuals can contribute to a specific electronic-mail conference. Recently during the strikes and demonstrations in China eyewitness reports have been sent to Greenet. Weeks after the massacre in Peking I wonder if it made any difference. Even the fast news could not stop the tanks. Information is one thing. How fast can we react to these messages is something entirely different. However, nobody can deny that it is a

good thing that we don't have to rely only on information from commercial news services (through Greenet you also have access to these services).

Greenet is, together with the Web in Canada, Econet, Peacenet and other networks in Sweden, Brazil and Nigaragua, part of big network 'family'. For five sterling Pounds (\$8.00) a month and 6 pence(10c) per minute you are in Greenet.

Geonet demonstrated by Michael Polman is similar to Greenet. Through this network also you can get in touch with the rest of the world. Type 'Africa' and you can read messages from the ANC, SWAPO and many other sources out there. What makes networks like Geonet and Greenet so outstanding is that their reports and messages come from people directly involved in the things they are writing about. Information on these networks is therefore first hand. Beside, you can also use these systems as a fax or telex. However one problem remains. One of Michael's e-mail friends in Brazil wrote a message, saying: "Although we share the same boat, we often do not share the same language".

The Data Network of the Library of the University of Amsterdam solves this problem partially by providing its services in three language. But for hackers this system is no fun at all: you don't need a password to enter it. It has totally free access for everyone with a computer and a modem. The system run by the University's computer centre SARA links 600 different research institutes in the Netherlands and has also access to major universities abroad. It contains 1.000.000 titles and is extremely easy to use. (I can tell you that from experience).

BBS Black Star is a small data network in Rotterdam and one can be sure that the police is one of their most faithful subscribers. The people who work for Black Star are all volunteers and the network is non-commercial: No subscription fees, only telephone costs.

Black Star provides mainly 'alternative' political news, i.e. news from groups which have hardly access to the regular media. Anyone can be a reporter of Black Star. The people of Black Star are thinking of connecting their network to an international family.making Holland part of the world again (?) The so-called world village. But then some people even don't like their neighbours.

Meanwhile participants to the various workshops had gathered in the basement or in the upper storey of the building. It is in the latter locale that Teo Whams workshop on ecology and computers took place, and despite some interference from the network demonstration in the main hall, it was well attended and the discussion was remarkably lively. Report:

Ecology & Computers
Workshop by Theo Wams
by Robin Verbeek

Theo works for Friends of the Earth; the name of the Dutch branch is 'Vereniging Milieudefensie'. This is an independent environmentalist organization with 17.000 members and 80 local groups.

The Netherlands is a small, low and wet country. Groundwater levels are very high and toxic substances therefore spread easily. Recently dioxine was found in milk from cows grazing around waste incineration plants. Furthermore there is a lot of smog because of dense highway traffic and heavy industries. Acid rain is a problem too

On the subject of computers, for which we are here, a paradox is immediately apparent: computers can help us fight pollution and depletion of resources, e.g: communication technology replacing transport and computerized production processes reducing of the use of depletable resources. But at the same time, the production and the disposal of computers constitute a major threat to our environment. Lets follow up further on that problem.

Producing computers causes pollution; Sillicon Valley is the most polluted industrial area in the U.S. as more than 3.000 chemical substances go into the making of a computer, most of them toxic. Leakages and other uncontrolled emanations have resulted in miscarriages and various health problems. Mysterious diseases have appeared among the labour force. Furthermore, freons (cfc's) are used as cleansing agents. Discarding old or obsolete computers causes pollution in various forms:

- a) harmful heavy metals such as cadmium and lead,etc get into the environment.
- b) use of plastics (PVC and Teflon) results in dioxine being released during the incineration process.
- c) flame retarders are also a source of dioxine.

Estimates of computer waste in the Netherlands by 1990 foretell an average of 100.000-120.000 computers to be discarded per annum. This constitutes 3.000 to 4.000 tons. If one includes printers, monitors, and other auxiliaries, approximately between 4.300 and 8.400 tons end up in the garbage dumps every year. Households contribute 50-60%, companies 30-40% and government institutions 10% to this waste mountains.

What can be done about this computer waste ?.

1) in design and construction: no use of plastics, flame retarders or heavy metals. Repairing and recycling could be made easier if screws and bolts are used instead of glue and solder. Standardization e.g. using the same plastic cases would also make for better recycling opportunities.

2) The collection of discarded computers, especially home PC's should be organized, may be by imposing a levy on every computer. Because of the costs imposed, recycling could then be made remunerative.

3) Prevention of waste in the first place by being more critical on buying computers. ("is this computer journey of yours really essential?")

The discussion which followed raised some interesting questions and possible solutions.

-Upgradability of computers should be fostered, so that their life-span would be extended. For instance, companies should guarantee their computers for 10 years.

-Something must be done about the high consumption of paper. Better screens, more recycling are possible solutions

-Consumer organizations must get involved and put pressure on computer companies to clean up their act. Laws should be enacted classifying discarded computers as toxic waste.

The workshop on artificial intelligence was presented by two very special spirits. Rolf Snijders works in the somewhat controversial field of neuro-linguistic programming, while Mr Luc Sala blends acute business acumen with a profound, if sometimes nebulous, reflection about computing. Report:

Artificial Intelligence as the future evolutionary design of humanity

Workshop by Rolf Snijders and Luc Sala.

by Geke van Dijk.

This workshop was presented by two speakers. Its subject was the relation between human mind and 'computer mind'.

The first statement was made by Rolf Snijders. He sees artificial intelligence as a natural consequence of the development of human intelligence. If we can develop a better understanding of the functioning of the human mind we can use this as a model for the development of artificial intelligence. (This is called Neuro Linguistic Programming). Ironically he presented an electronic slide-show to illustrate that the human mind is built up very much like a computer mind. So we can just as well use our understanding of the computer mind to develop the necessary understanding of the human mind (which is indeed needed

for the above mentioned understanding of the artificial mind!). In the ensuing discussion somebody rightfully remarked that this way of thinking was very much circular.

The point Rolf Snijders wanted to emphasize in his speech was that the evolution of the natural (human) intelligence has gone so far that nature itself is in danger as man, the most intelligent animal on earth has turned into a threat to all other forms of life. Rolf Snijders sees artificial intelligence as a possible solution to this threat. He stated that the highest aim of mankind was always to "grow" but now we are approaching the ecological limits of growth (over-population, waste, pollution). Artificial intelligence might then provide us with a possible escape. He went on to formulate two suggestions: 1. that our fascination with computers will keep us from reproducing ourselves, which is a solution to the over-population (!!!, red.). 2. that a world-wide network of data-exchange will help us to develop a policy on the ecological problems.

There was precious little opportunity to start a discussion on these interesting statements as the second speaker was also very eager to give us his views about computers and the human mind.

The statement by Luc Sala not only refers to the development of artificial intelligence, but to the relation of all computers in general with our minds. He pointed out that every contact with a computer has an effect on our own mind, good or bad. He compared this effect with a form of hypnosis.

Interaction with computers changes the way we think and the way we act. As long as the exact nature of this effect is unclear Luc Sala thinks that we should be careful in exposing children to this technology. And in the meanwhile there is a lot of research to do. He stated that it is very important that hackers play their part in guiding the process of developing computer technology in the "right" direction.

After this introductions there was a lot of discussion whether it is necessary to be afraid of the impact of the computer on the human mind. Although everyone is usually completely fascinated (or even absorbed) when starting work on a program, in the end most people are smart enough to know the difference between the machine and themselves. And if not, is it really that bad? (What to say about people who play the piano, or read books for ten hours a day ?) Perhaps it is even better, after all, to have little children get used to computers from an early age, in order to develop a conscience of artificial intelligence?

The workshop most eagerly awaited was of course the one on computer virusses, presented by Bernd Fix and Allen Lundell. As can be readily felt from the report, there was some heat generated in the basement:

Workshop on Computer Virusses
(Bernd Fix & Allen Lundall)
by Bernd Fix.

Computer virusses have been around for quite a while now but are getting more media coverage than ever. The first topic in this workshop was to explain what a virus is exactly, how it works, and what other "computer animals" can be found: worms, bacterias and trojan horses. After giving a short retrospective view on the history of computer virusses [1], the participants of the workshop mainly exchanged their experiences with computer virusses [2]. The workshop then took a look into the future on how computer virusses could develop and how they might be used by hackers as a new way of computer programming (viral operating system, self-modifying software) [3].

ad[1]

In 1983 Fred Cohen was the first to publish a paper of what he (and his teacher Len Adlemen) called a "computer virus" - a piece of program replicating itself like a biological virus. The participants in the workshop who did have previous experience with them all agreed that it is very unlikely that Fred Cohen is the "inventor" of computer virusses but he surely is one of the first who published something about them. In Europe (and the U.S. too) computer virusses did not become a hot issue before 1986/87 when the first virusses hit computer systems - mostly PCs and Home Computers. In Germany the Chaos Computer Club were the first to bring up the topic of computer virusses during their yearly "Chaos Communication Congress" in late 1986.

ad[2]

The audience in this workshop could be divided into (at least) two groups: people who have genuine experience in programming virusses and know quite a lot about them and people who just came along because they were interested in the subject. This resulted in the discussion in the workshop being mainly an information exchange between three or four people - but I am sure it was also an interesting event for the people who could do little more than listening.

More and more official institutions work on "the virus threat": The University of Hamburg (West Germany), has set up a "Virus Test Centre" where scientists examine computer virusses they find and "catch" in a computer system. All people with real virus experience could agree that it is very easy to program a computer virus and that the threat of virusses hitting computer systems is still there. Worse still: it is next to impossible to protect a computer system (especially PCs) effectively.

ad[3]

The last thing to be discussed was the question "Can virusses be used by hackers as a new way of computer programming?" (viral operating system). Someone mentioned that nobody ever would think of getting rid of germs, bacteria and virusses in the human body - we learned to live

with them and even to use them in our evolutionary development - yet nearly all computer scientists want to have their computer system free of viruses!. Of course the analogy is not very good because nearly all computer viruses today are "lethal beasts" but it is also possible to envisage a development whereby computer viruses can be used to expand computer programming towards an "evolution" instead of the old fashioned "do what I mean"-type of programming. So maybe we will witness a "computer and software liberation" in the near future.

Stefen Wernery, from the CCC in Hamburg, gave the first workshop of the afternoon, on "Citizen Networks". This report is translated from Hack-Tic magazine:

Civilian Networks
Workshop by Stefen Wernery
by Rop Gonggrijp

Stefen Wernery's workshop on civilian networks was not only about the fairly theoretical backgrounds of putting up an independent electronic network, it also illustrated from concrete practice a large number of issues connected with that kind of practice.

The best known example of a citizen network (in Germany, red.) is the BTX-net. This network uses the postal "Bildschirmtext" network (akin to Viditel or Minitel) in order to switch data cheaply, i.e. at the local call rate.

The BTX net is invisible to its customers, who use the Zerberus mailbox system to make or read messages. The Zerberus program is then run on BTX-customized software. Software for use with UNIX machines, FIDO BBSs etc. is currently being developed."

After the workshops everyone gathered in the main hall for the much awaited debate:

Gordon Pask, Lee Felsenstein and Mike Robinson on:
The Community Memory Concept.
Moderator: Michael Polman

Gordon: I do believe that metaphors are based on a logic, not on a right or wrong nor on a true or false. Instead they are based upon a logic of coherence of distinction and/or dynamic. The metaphorical language is what professor De Zeeuw would call a package of variety. Distinction is generated by conversation, as well as coherence and the prerequisite love between those who converse.

Lee: I quite agree: distinction is what it is all about. If all distinctions and all conflicts were resolved, we should be in the end state of complete entropy. I am in no hurry to be there. In the passage to final entropy there is a great deal worth living for. The primary criticism that is leveled against almost any technological implementation in the communication area, is that it "de-humanizes" the process, that it reduces distinction. After all if you speak to someone on the telephone you physically talk to a machine. If someone hasn't grasped the metaphoric nature of what's happening - that there is another person somewhere else in the world who is talking to a similar machine and that they hear each other - one will think that the person on the phone has gone crazy because every now and then picking up a phone and saying different things to it is insane behaviour.

Mike: I always have problems with the notion of artificial reality, because I am not at all convinced about the opposite which is the implication that there is some sort of notion of objective reality which is there fixed and social and somehow beyond our control. I think it is all well within our control if there is such a thing as a 'we'. The problem really is to create that 'we', which is what Gordon's conversation theory and Lee's experiments with community networking are actually trying to achieve.

Gordon: An organism exists, you and I, because there is a boundary, a distinction created. Inside that distinction - which we as organisms create- there is chaos, that is entirely deterministic but an entirely unpredictable activity. Adopting this and the metaphoric idiom for social language makes one come, logically or rationally at least, to the conclusion that ofcourse we are participants, because there are no observers. As participants we are responsible for everything we do.

Lee: The Community Memory concept involves how one communicates within a social organism which one is part of. Gordon's words say for me that the ultimate observer is within and that we must recognize that ultimate observer: it is part of us and it is a part of our social organism. We have to arrange our communication systems and our metaphors to take account of that.

Audience: Is technology always reinforcing existing social relationships or can a minority use or an alternative or radical use of technology change existing social relationships?

Mike: I think the idea of Community Memory as a machine-based thing, some sort of database that people can have access to to find out what is going on, is the sort of thing that will reinforce existing social relationships very directly. In general people will not have very much power to change the structure of what is going on in that database. My point is that knowledge is not something that is disembodied. Knowledge is always attached to people. If we can implement any sort of Community Memory using computer technology then the endpoints of that always have to be people. We have to be asking whom we are communicating with. We are not communicating with a system. A system is a meaningless concept. This means we have to design systems where there are indicators and we can talk to other people through them. We don't just interact with a disembodied database.

Gordon: You converse through machines. They catalize, they do not provide conversation. The important thing is the participation. Entropy is a system maximum disorder, which is distinguished by its own boundaries. We make ourselves a competition between the internal variety and the external variety to help create the boundaries..

.... (the discussion then develops towards political themes like centralization, decentralization, governmental interferences, individual autonomy).....

Gordon: I don't see how we can avoid the shit than through entropy. There are many languages. In the science of andragogy the diverse metaphors that unite society are integrated and coordinated. The metaphor of this meeting is the Hitch Hikers Guide To The Galaxy. Ideology is global politics of unity, to realize some such metaphor which may no doubt be realized in many idioms and many ways. Intergalactic unity is like the intergalactic gargleblaster, that at one moment is going to be served, the restaurant at the end of the universe. We can see the power of Lee's system, but the language of art, the language of movement, the language of light, etc.etc. are replaced by a string of text.

Lee: One of my many aphorisms as an engineer is that my job is the creation and solutions of problems, not necessarily in that order. So say that we have lots of problems to go, including for expanding the communication for language other than written. I admit to that, that's why I named my company Golemic Inc. To go on with what we've got. I did my little bit in creating the Personal Computer so now we have the possibility that the level of ownership can be brought down, but you can never get it all the way down. We are continuing to try. Now we are about the task of creating an imperfect tool so that people only manage to connect, and continue to connect. That's what it is all about: How can we connect. We won't have an answer for that absolutely, but we'll have some temporary attempts. Community Memory is such an attempt. Watch for it in your neighborhood.

This lively exchange closed a heavily attended and very spectacular first day. In the evening, the many participants who remained first had the pleasure of watching themselves on the Dutch national evening TV news, and went then on to applaud Terry Gilliam's frightening 1985 masterpiece, the film "Brazil", which was chosen as an appropriate warning to the danger of a world with too many machines and too little humanity.

THURSDAY, 3 AUGUST 1989

"THE HACKER IN THE LION'S DEN"

As the doors of Paradiso were flung open at 10.00 again, the many visitors (yesterday's TV-programmes seem to have attracted a new complement of the curious) brace themselves for a heady day of discussions ahead. The subtitle to to-day's theme is "on \$\$, secrets and the right to information". The first

reports of what happened the previous days can be read, or rather deciphered, on the giant screen. These have been provided by the edit group, working also in the basement next to the sysops. After yesterday's experience these brilliant but somewhat withdrawn spirits have managed to convince the SUN representative in Holland to provide them with a somewhat larger, "hacker-proof", or at least very capacious model. Not only was the request promptly granted, but two technicians from there were detached for the day as well, may be also for schooling purposes! Therefore we were also technically ready for the day ahead!

The hottest item on this day's agenda was the debate between Chaos Computer Club's "nestor" Wau Holland, and "young" Hans Hübner, aka 'Pengo' on the hard practice of the celebrated Hacker Ethic. But first Captain Crunch, who has put up many days in preparation for the event, and still busybees around (beside disappearing unaccountably for hours on end !), is going to tell us about his experience with the Soviet telephone system, and the world of electronics in the USSR in general. Report:

**Russian Networks and Perestroika
Demonstration by John Draper
by Ad Bakkenes**

John Draper (code name: Cap'n Crunch) was speaking here as a citizen diplomat for the Planetary Peace Project., a joint American-Russian grass-root venture. This is what he had to say about the Soviet phone system.

The phone system in the USSR is still very simple by Western standards. But it is also much more guarded. by the authorities. Yet, you can hack it if you really want, and its officials are apparently not insensitive to small presents. Watch out, though, the KGB is keeping a close watch..

The lines are very noisy, you hear constant sounds and the echo of your own call, and this makes it easy for the KGB to trace you. Phoning from a hotel is another matter. You get so many instructions about what to do and what not to do by phone and then you still have to be connected by a operator. It might take several hours before you are connected at all. Of course, you start trying all sort of things you are not allowed to. In all, communication by phone in the USSR is not that easy right away. And you may also try to get in one of the many restricted phone systems.

Something about the availability of auxiliaries:

modems

They do use modems nowadays. A very good one there is the US Robotics 2200. This is the one that may be to be exported from US to the

USSR. The problem with modems is that you need permission of the KGB to have one. You have to fill in many forms and explain what phones you will use, before you can start beeping.

diskettes/floppies

If you want to do something with diskettes in the USSR, you have to be sure to bring your own with you and register them. Still the customs will be pretty paranoid about them, because, as far as they are concerned, these diskettes are uncontrollable and possibly dangerous information-carriers.

programs

The programming tools they really love over there are Forth and Turbo Pascal. They are also very fond of Norton Utilities, because it enables them to investigate foreign programs. For the same reason they want to learn a lot about low level knowledge of IBM-machines. As they want to know all about these American programs, many Russians are learning English, so they can read English manuals.

San Francisco-MoscowTeleport

To get more exchange of information between America and USSR, a group of people in San Francisco started a Teleport service between these two countries. For the USSR it is advantageous too, but any person wanting to work on this network must ask permission from the KGB first. Meanwhile, at the other end of the line, the CIA is there too. Not very much yet but still a start for world-wide Perestroika.

John had also a few more things to tell on the subject of 'phone-phreaking', and his past activities in that field, and would have probably gone on for quite some time, but he had to make place for Wau, Pengo and the debate moderator Jo van der Spek. A report first:

**ETHICS AND COMPUTER
debate between PENGO and WAU
(aka Hans Hübner & Helwart Holland)
Moderator: Jo van der Spek
by Roelof Langman**

Thursday morning, Wau Holland and Pengo discussed the question of hacker ethics. Because of its expected emotional nature, they discussed in their mother tongue, German. An on-line translation in telegram-English was projected on a screen.

Why this discussion? Pengo, a young sympathiser of the Chaos Computer Club in Hamburg, became world news after his alleged sale of commercial computer information to a KGB agent. Wau Holland, one of the Founding Fathers of the CCC, has called for the interruption of all contacts with Pengo. "Just hang up the phone if he calls", he said.

At the moment, Pengo's past activities are being investigated by the West German Intelligence Service. They want to know the exact details of his hacking history (he used to break into VAXes) and his transactions with an agent of the KGB.

At first sight, Wau Hollands anger seems paradoxical. "Pengo has made confidential information public", he said. Isn't that what hacking is all about? According to Wau, it is not. "In the Chaos Computer Club we have a tradition of careful handling of the secrets we discover.

Responsible handling of this information has enabled us to use it very effectively in a political sense", he claimed. By breaking with this tradition, Pengo broke the trust that keeps the CCC together.

Pengo doesn't brag about his endeavours. He admits that he made a mistake. But he doesn't agree with Wau's presentation of the CCC as a primarily socially responsible, politically mature social body that happens to concentrate on computer technology as a new social medium.

"The first thing you noticed about the CCC as a boy of sixteen, seventeen was its total fascination with technology. Hackerdom was nothing but discovering the details of this new technology, and doing everything possible with it", he said. "When breaking into a mainframe, no single member of the CCC thought about the Golden Rules of Hacker Ethics at all."

Pengo did not want to discuss the validity of Hacker Ethics, he wanted to discuss the experience of hackerdom. "Fascination with technology led more or less automatically to fascination with power. Breaking into computers was a more or less unreal pleasure. Making contact with this KGB agent suddenly was "total live", very real indeed. Suddenly I became the star in an espionage movie. Hacking was just playing with a toy, contacting the KGB agent was real social interaction." Alas, the intentions of the KGB agent seemed different from Pengo's: Pengo wanted the interaction, the agent wanted valuable economic information and terminated the contact when he didn't get it.

This did not assuage Wau's anger. He began to treat the subject as a question of being grown-up. "You started out playing a game that you were not old enough to play. From now on, you are a part of the game that secret services play; you are their prisoner. You passed a threshold that you should not have passed". Wau did not deny that the fascination with computer technology comes close to the fascination with power. But "being fascinated means being chained. Whoever is fascinated is enslaved: there lies the limit." He claimed that for the CCC, this kind of fascination was a thing of the past, because its members now knew how to control it .

Some questions were asked from the audience. A woman asked Wau if he did not play the game of the secret services just as well as Pengo: "It is well known that these services obtain up to 90% of their information

from public sources. When you concentrate on them in your discussions as you do, you make them more important than they are." Wau launched on an exposition of his world views, in which secret services, together with domination of man by man in general, was invented by some priests a couple of millenia ago, and had no hold on him whatsoever, so he had to refute these accusations vigorously. He even predicted the disappearance of all secret services in about twenty year's time.

New Zealand asked, whether the safety of data wasn't the responsibility of the system administrator in which case all data that a hacker was able to secure, would be her/his by right. Pengo thought this was a bit too simple. "It is true that we could obtain a lot of data because system administrators were not aware of any risk at all", he said.

Another woman asked, whether the concentration on secret services did not obscure the fact that not governments, but big businesses were the real sources of power. It was quickly agreed that in venturing into deals with multinationals, the same problems were encountered as when liaising with intelligence services.

Armin Murmann, from Geneva, contended that hackers always talked in terms of form, and very little about substance, when discussing computers. "What do we do, when we are tired of hanging around on our computer networks?" He proposed talking society and politics when discussing computers, and hoped things would develop in that direction during the congress.

"As long as we can't control technology, we have to control ourselves", the discussion's moderator Jo van der Spek concluded, whose proclamation of the Right to Make Mistakes (and learn from them) was applauded by the audience.

Their discussion was sharp and at times, emotional, also among the public. The moderator had not an easy task in keeping everything in line. Here follows the transcripts of the discussion, in which at some stage, our antipodean colleagues from the Galactic Hacker Party in New Zealand participated as well:

Debate between Wau Holland (Chaos Computer Club) and Pengo (Berlin) on Hacker Ethics transcripts by Bernd Fix.

Note on the Participants.

Wau Holland (37) from Heidelberg/Hamburg: He was one of the founding members of the Hamburg Chaos Computer Club in 1981. Aside from his work for the CCC, he has been a program developer of type-setting software for the past twelve years and runs a company for DTP software called "WYSIWYG" (What you see is what you get).

Hans H. Hübner (21, alias "PENGO") is a computer specialist from Berlin. He made the newspapers' headlines some time ago as he and a few other people were accused of espionage for the KGB, the Soviet secret service.

Moderator:

Wau, what's your feeling about the KGB story according to which Pengo and other people sold information to the Russian secret service?

Wau:

I am angry and disappointed. One important thing is that hackers must trust each other. Pengo for example took information from other people and sold it without telling the original owners about it. So he is spreading mistrust among hackers. Where people work together, it is wrong not to be honest in your communication with others. Especially we as hackers should be guided by a hackers ethics, as it was introduced in the 1984.hackers conference. The hacker ethics says:

- 1) Access to computers - as which anything that might teach you something about the way the world works - should be unlimited and total. Always cling to the Hands-On imperative.
- 2) All information should be free.
- 3) Mistrust authorities - promote decentralization
- 4) Hackers should only be judged by their hacking, not by bogus criteria such as degrees, age, race, or position.
- 5) You can create art and beauty on a computer
- 6) computers can change your life for better.

I was also angry to see that in the book about the KGB deal, they gave a false rendering of the hackers ethics. You should not think of the hackers ethics as an iron law; hackers always break rules, even their own. But what Pengo did is an extreme example of ignoring them, altogether

Moderator:

Pengo, what do you think of that?

Pengo:

No rule or law can be an absolute truth. For me hacking foreign computers was caused and guided by fun and fascination. When I hacked, I asked myself no questions about the hacker ethics .

Moderator:

Why did you sell information to the KGB?

Pengo:

Wau is wrong in saying that I sold information I stole from the hacker scene. We contacted the KGB ourselves. We were only interested in economic profit. We thought that an intelligence service would be interested in hacker knowledge.

Moderator:

Would you admit that you broke the hacker ethics? Or did you just find it a fascinating business after an intelligence service was involved?

Pengo:

Intelligence services have always been interested in computer knowledge. And we thought of ourselves as the most ingenious hackers in the world. So we didn't bother too much about the question for which people we were working in the end.

Moderator:

And this fascination went on after the KGB got involved?

Pengo:

First we penetrated computers and didn't see the social consequences of our actions. With the KGB everything was getting real. It was an adventure, like a film. You could manipulate real computers anywhere. And the contact with the KGB was real - everything was a thrill.

Moderator:

So with the benefit of hindsight you think it was like a film and now you regret it? I mean you had something like a star role in a film. Are you sorry about all that now?

Pengo:

No, I am not sorry and I can't change the past. It was my decision to do the things I did.

Moderator:

Would you do it again?

Pengo:

I think what I did was logical for me to do at that time.

Moderator:

Wau, do you agree that there are no absolute rules?

Wau:

I do think there are absolute rules. For example I am sure society works better the more people work for society and not for themselves - that means there are absolute laws in a social context just like there is the law of gravity in the material world. On the other hand the society can't work if there are unnatural rules such as strictly moral rules. But let me say something to Pengo: He said that it was all like playing a game. That's true, but it is a game where you don't make the rules - you have to follow the rules of other persons or institutions. As long as you do not overcome your fear, you will remain the victim in this game or at least a

chess figure on someone's chess board. The secret services are good in playing such games because they have done it for such a long time now. It's their job to play these games and they won't stop doing that. So if you don't stick to your own ethical standards you remain their plaything.

Moderator:

Pengo, did you come to accept the hacker ethic in the end?

Pengo:

You are asking too much whether I followed the rules or not. All I can say is that I didn't have them in mind. I just did what I wanted to do.

Wau:

Everybody has his own liberty but then everybody should be aware of the consequences.

As for going for a deal with intelligence services you should have thought twice about it. Trying to play this game, you destroyed personal trust. These people (in the hacker scene, red.) exchanged information and knowledge with you whereas the secret services never give any information to outside people.

Moderator:

What about the first point of the hacker ethics: Information should be free?

Wau:

This is an old question: Who profits? Every time I deal with information I have responsibilities. I can kill people with false information. We have discussed this responsibility in the Chaos Computer Club. For example you could perhaps hack into the control computer of an atomic power plant and provoke a catastrophe.

Moderator:

Isn't that also somehow fascinating?

Wau:

Fascination alone is dangerous because you might not see the existing limitations. I do not like social control but individuals must be responsible for what they are doing. The Chaos Computer Club is not just a group of techno-freaks. We have been thinking about social consequences of technology from the very beginning, and I think that our strength derives in part from our moral standards. We accept fascination but don't want to become the slave of it. Everybody must face the question: What am I doing?.

Moderator:

Pengo, what are you doing now?

Pengo:

I tried to make a living out of my abilities and to do more positive things than to work for the KGB. At the moment I am working on an international network.

Moderator:

Do ethical questions arise in your present work?

Pengo:

Ethics remain a problematic question. Technique should not be separated from the people in it. When I started with computers, I was 16 years old and had no idea about that. For all I knew, the (Chaos Computer) Club was a group of techno-freaks and so it is no wonder that we young people tried to go ahead with purely technical things.

Moderator:

Wau, are the moral standards you mentioned not a bit too high a benchmark for ordinary hackers?

Wau:

Well, we Germans have already such a bad reputation that one couldn't be careful enough. If one really start doing bad things, my suggestion is: We all live in one world, we as hackers must face social responsibility too.

Moderator:

Now you both, Pengo and Wau, have admitted that ethical rules are necessary.

Presently, we are going to ask for reactions from inside Paradiso and from the outside.

Question:

Can you precise these rules of ethical behaviour and their consequences?

Pengo:

This question is difficult to answer.

Wau:

Involvement with secret services always has bad consequences and must be avoided. I think the Chaos Computer Club is a *public* service rather than a *secret* service - this is what the affair tells us. To give any information to the public is good, to give information to a secret service is bad. Ideas belong to the world but intellectual property belongs to an individual. One has to respect this always. Thanks to the information technology, today secret services are redundant. I Think that secret services have enormous difficulties to handle information. Normally they even keep information secret to themselves.

Question:

What is the difference between a secret service and a multi-national company? You say selling information to an intelligence service is bad, but what about a multinational? Is that O.K. from your point of view?

Wau:

No. Some multinationals are even bigger and worse than most of the governments today. We are against deals with both of them. We do not want to enhance their information advantage. Information should remain cheap - it's not good if your level of information depends on your bank account. Business with information is only O.K. if it is in the public benefit.

Moderator:

Take one example: Hackers enter the computer of SHELL in South Africa and could destroy it. What should they do?

Wau:

I am against destruction in any way. I think problems should be solved by moderate means.

Pengo:

I can't imagine that if someone has the possibility to do it that they should use this ability. It's difficult to make a distinction between a company and a government.

Wau:

Well, then at least you should not *sell* that information.

Moderator:

So would you give for example information regarding SHELL to the ANC or not?

Wau:

This is a very personal matter. If you believe the South African government is evil, then you should give it to the ANC - but that is your personal belief. I have never believed that it would be possible to control computer technology. This is what fascinates me about computer technology.

Moderator:

Wau, do you think the problems with intelligence services are now behind us?

Wau:

Yes, I think that within 10-20 years secret information will no longer exist. Yet I do not accept that you can do anything you like with information - as for example to sell it.

Moderator:

Wau, you have just stated that control over computer technology is not feasible, so why should we talk about ethics at all?

Wau:

Because people should think for themselves. Trust is the single most important thing a group can have. Therefore I am very suspicious of governments and companies. Groups should be small enough to maintain *personal* trust.

Question:

Computers are just a new method to keep things secret to the mass of the people - what is your opinion about that?

Wau:

That is true. Look at the development of book printing. Now you can see the same thing happening with computers in the Third World. They have computers there but they are deficient in using them - but I think this will change.

Moderator Jo vd Spek concluded the debate by saying that we had to restrain ourselves, as long as technology in itself is not restrainable, but at the same time he proclaimed everyone right to make mistakes and not get immediately outcasted for that, a statement that earned him nourished applause from the public.

The afternoon's activities were again divided in a workshop part and a general debate. Many participants must have wished they would be able to split themselves up in two or more persons. Instead they had to make difficult choices between the powerful combine of Stefen Wernery and Cap'n Crunch (who decided to merge their respective workshops) and the debate on the freedom of information moderated by Marieke Nelissen. Let's start with a report on the latter:

Report on the debate about "Information under and as a threat"(Thurs. 3 Aug.89)

Moderator: Marieke Nelissen

Participants:

- **Peter Klerks on 'Scarcity of Information & New Initiatives In The Netherlands'**
- **Werner Pleper on 'Right to interfere on Information'**
- **Suzan Ugursoy on 'Naziware'**
- **Zwarte Ster on 'Bulletin Boards'**

by Robin Verbeek

The debate started with a short speech by each of the participants. *Peter Klerks*, a Dutch political scientist with particular interest in police and security services and their influence on society, began his presentation outlining various problems concerning freedom of information and the protection of privacy.

During research for his book "Counter-terrorism in The Netherlands", it was difficult to get relevant information from the police. Little was available from public sources and the most interesting parts of the book are based on stolen material, the loot of burglaries by action groups. Another example refers to recent developments in Europe-wide cooperation between police and judicial authorities, details of which are kept secret even from the national assemblies of the various member states: when the draft of the treaty was brought to the open, it contained proposals such as to make punishable even indirect aid to "illegal" refugees.

It is clear that these European wheelings and dealings should be open to public debate. The above example illustrate that information is a strategic commodity and possession of it has everything to do with power. Another example was the Chernobyl disaster, whereby national authorities withheld information from the public or manipulated it, while independent environmental groups, performing measurements themselves, distributed their findings by bulletin boards. But this type of information is not cost-free and thus not accessible to everyone. The cost factor plays an important role, because use of a databank is expensive and it takes time and knowledge to maintain one. But there are other possibilities. For instance, the bulletin board system of "the Black Star"(Rotterdam-based), which has been set up by a small group of dedicated people. It is free and provides information on all kinds of news like companies that trade with South Africa, or are involved with nuclear energy, etc. All these services are run on a non-profit basis.

Peter would like the discussion to centre around 1) freedom of information as a civil right 2) use of bulletin boards, and 3) the criminalisation of hackers

Suzan Ugursoy talked about the spread of "nazisoft "(aka "naziware") These are fascist computer games and bulletin board messages in W.Germany. She demonstrated a few games (this aroused the ire of some members of the public). Her plea was that censorship is not a solution but through discussions and seminars with parents and teachers (because these games are mostly played by school-children) there is a hope to enlighten people of the dangers behind these games. Thus freedom of information can turn into a threat.also.

Werner Pieper stated that all information should be obtainable to everyone instead of being the monopoly of the state and the multinationals because they use it as an instrument of power. Personal information on the data bank of the police, for example, should be open to the person involved to check the correctness of the data.

The discussion centred around the following questions:

-What can be done against the spread of these nazi-games? Suzan stressed giving more information to adults. Peter said that these games would not be allowed on the Black Star bulletin boards. Others were afraid of a new form of censorship. Some had objected strongly to the showing of these games, but one woman remarked that on the previous day a naked woman was shown on the giant screen and no one had objected.then.

What norms are we using? Is there a difference between 'good' and 'bad' media?

-Should all information be public? Peter argued that personal data should be protected, because in repressive times this information could be used against people.

-Does everyone have the access to information? Some argued that computers were cheap, others pointed out that there is still a lot of poverty around. Someone remarked that hackers were typically middle class males.

Marieke, the moderator, closed the discussion with the following conclusions 1) access to networks should be easier and less costly

2) a difference must be made between personal data and public information

3) There are forms of information which pose a threat

Meanwhile, the workshop on security issues was extremely well attended as well, and the eager participants had to put with a lot of discomfort in the overfilled basement, yet they did not even mind the strict anti-smoking rules rigourously enforced in the immediate (say a Mile or so) vicinity of John Draper! A report:

**Workshop on Security Issues & Intelligence services
(John Draper & Stefan Wernery)
by D. Truong.**

This workshop was heavily attended, by more than a hundred participants.

The discussion was supposed to develop a sense of sharing among hackers' in terms of their experiences with several intelligence services, but instead it focused mainly on a recent confrontation the workshop's main hacker panelists, Karl and Pengo, had with the West German Secret Service.

According to Karl, the West German intelligence did not seem to have a closed computer system and upon discovering the hackers' network, expressed interest in finding out about existing hackers' groups and who was doing what in German hacking circles. They even tried to coopt Karl into working for them! Their lack of knowledge, it seems, is caused by the unwillingness of European intelligence services to share information about hacking & hackers among each others.

There continues to be very little cooperation between secret services on this issue. The workshop then attempted to compare American and West German intelligence services. Karl and Pengo held the view that the West Germans are still learning and are now trying to control the hackers' communications links through various techniques. Thus, the need arises for more networking among hackers, wider dissemination of information so opportunities for control are diminished.

Captain Crunch (John Draper) went on to relate to the participants his own fascinating experiences with various US agencies. The responsibility for combating computer hackers now lies with the CIA which can tap, bug, monitor anyone without having to obtain a legal warrant from any federal judge. At the same time, the National Security Agency (NSA) is the even more ubiquitous electronic agency, a Big Brother listening to everything. In West Germany, there is no such equivalent organization. The West German special group on computer crimes was mentioned but they do not seem to be very effective. The American government, according to Captain Crunch, has become totally paranoid about hacking from outside the US; it tried all kinds of anti-hacking security measures only to find out that computer data networks like Livermore labs' are still being hacked to death. Karl pointed out that the US were absolutely mad about getting hold of the German hacker(s) who got into the NSA computer net.

Other participants raised the question as to how one could identify someone as being in the employ of an intelligence service, the KGB for instance, when one is approached by such a person. Actually, it is very difficult to do so. Intelligence services are by nature, as Captain Crunch said, very "discreet." The KGB even participates in the only existing,

officially sanctioned, East-West computer e-mail system, the San Francisco-Moscow Teleport Service. This is a very useful but also very much controlled e-mail system where everyone listens in.

The workshop's chair asked how fellow hackers could devise ways of coping with the annoyance of intelligence services. There were lots of suggestions, ranging from encryption, discretion (sic!), and so forth. The most tangible suggestion was really to network: networking means certainly more than out-and-out hacking. It is safer anyway, especially in the light of tougher anti-hacking laws that are being introduced in Europe in general (with the Netherlands, hitherto devoid of specific legislation, soon to follow). The workshop's panelists agreed that only small networks should be set up and linked together. Every computer a gateway!

The other workshop that afternoon was directed by Daniel de Roulet from Geneva, a specialist in medical computer systems doubling with an author. His workshop was less massively attended (probably most people were knocked off by the sheer amount of grizzly information they were deluged under in the previous session), but very rewarding nevertheless. In fact, his was one of the activities on the ICATA that had the largest spin-off in terms of follow-up projects. A report:

**The Hospital Information System (HIS):
Storing private data in systems...or not?
(Daniel de Roulet)
by edit group**

De Roulet's main point is to emphasize the difference between commercial and medical databases when it comes to the storage and retrieval of private data and security arrangements. de Roulet became very concerned about a statement in the draft ICATA-declaration, to the effect that no confidential, private data should be stored electronically (this problem seems to have been clarified by Lee Felsenstein postulating the acceptability of *consensual* data, i.e. data stored with the agreement on the individual concerned, red.). As de Roulet says, modern hospitals can not do without databases to store information about their patients, enabling them to react fast in emergencies. you should not put banks and hospitals on the same footing when data are concerned. They are vastly different things!

The main point of the HIS is that such systems save time and so lives, says de Roulet. On the other hand, someone in the audience remarked, there are still the problem connected with people losing their sense of privacy and feeling they just become a piece of information in the computer. De Roulet agreed, but said this was a problem of society in general becoming computerized in an inhuman way. As far as the security of data stored in a HIS was concerned, de Roulet stressed that

the stereotype computer hackers came only last in the long list of potential confidence-breachers, well after insurance companies, indelicate journalists or hospital staff themselves. Surely a refreshing viewpoint among the current tendency to criminalize hackers!

In the Paradiso Board Room a meeting took place that afternoon between the editors of a number of publication concerned with hacking or critical computer use, viz Hack-Tic, Die Datenschleuder (the CCC-organ), 2600 from New York and the french magazine Terminal. The latter not really a hacker publication, but nevertheless prepared to liaise with hackers in the common fight for the freedom of (electronic) information.

In view of the endeavour by the (now demissionary) Netherlands government to enact criminal legislation against hacking, the organizers had also planned to hold a forum discussion with representatives of various national political parties and other institutions. The Green Left Alliance Party had agreed to organize it, but they were unable to drag the politician out of their round of holiday pleasures - or may be, these were simply afraid to enter...the Lion's Den. So no debate with the political body, but we still had a cultural event. Ravijn Publishers launched the Dutch version of P.M.'s "Bolo'bolo" on the GHP/ICATA. Mysterious signs appeared on the giant screen, and a strange voice began a monotonous incantation of some passages of the book. By some kind of magic, the (modest) stock of copies was then promptly sold out.

Another planned spectacular was the dusk-to-dawn game-night, avowedly a major attraction for the hacker tribe as usually pictured in the media (young, bespectacled, male, and completely hooked to the machine). But two days of solid discussions on serious subjects (or long hours spend in the 'hack-room upstairs' learning & practising the latest tricks of the trade) had apparently exhausted them of. So the adventure was limited to a few bouts of multi-user amusement, e.g. an Atari-ST Midi-maze for 10 players, while most people went for the good Dutch draught at the bar and headed for (much to the organizers relief!) their various crashing places at a very Christian time...

FRIDAY, 4 AUGUST 1989.

"THE FUTURE BEHIND THE COMPUTER"

This last day of the GHP/ICATA was placed in the sign of the "Third World" and endeavoured to make links between the threat to the freedom of information in so-called developed countries and the problems faced by the so-called under-developed countries not get crushed and left behind at the same time by the onslaught of technological advances. Freedom of

information, overflow of information, balanced flow of information, together with the issue of computer literacy were the themes we wanted to discuss with counterparts in Nairobi, Kenya. These final discussions would then enable us to draft the ICATA declaration with a maximum of feed-back from a maximum of sources. But the vagaries of modern technology decided otherwise in a somewhat definitive illustration of the subtitle to the day's moto: "the illusions of the global information village". A report:

**Link with Nairobi.
by the edit group**

Central subject was: is it possible to use computers in such a way that they fulfil the needs of the people in the South.(aka "the Third World")?

The intention was to have those present in Paradiso discuss with a panel of communication specialists from all over Africa who had gathered at the African Council of Communication Education (University of Kenya) for a summer course. Unfortunately however, the link with Nairobi did not materialise due to a host of "technical" problems. This was very illustrative of the difficulties attendant to "modern" communication in the South. Fortunately, the Nairobi participants had send a statement beforehand, and this was used as a basis for discussion with other nodes we managed to reach during this session.

Thanks to Michael Polman from Antenna, a support group for electronic networks in the South, a contact was established with the Worknet-system in South Africa. Worknet is currently used by 60 NGO's and is linked with the Geonet electronic mail system.

While this link was being put up, some examples were discussed of how communication systems were able to assist democratic processes in many Northern and Southern countries.

Information about the China-uprising this year and of the struggle in South Africa is in many cases only able to reach us because of the electronic mail possibilities: it is fast, immediately available, cheap and uncensorable. This last quality derives from the packet-switching system of despatch whereby countless messages from many different sources are bundled together, sent over various routes, and are reconstituted upon arrival only. So basically access to a telephone line is all what is needed to by-pass censorship. (Repressive regimes in the South have now become extremely suspicious of computer use by non governmental and grass roots organisations!)

In a statement that reached us from Uruguay (Antenna had set up a world-wide conference on ICATA) nineteenth-century railroads were compared with computer-technology nowadays. A nice example was given of how Mexican revolutionaries used the train-system in a vastly alternative, but nevertheless highly effective way: When revolutionaries could not pass through Huerta because government troops blocked the

railroad, the revolutionaries simply took a stretch of the railway line, and by putting it up in front, and then dismantling it behind their train, drove step by step around the city.

It is the same to-day with computers: we should be able to use computer-technology inventively, often in an other way than the designers and the authorities had in mind

And so it happens that many groups and individuals in the South have for some time now, discovered the possibilities of computers and electronic networking systems. But in discussions with people in the North, they hear, much to their surprise, that computer-technology might not be "appropriate" for them. There is a lot of misunderstanding and obfuscation here, and some of our correspondents from the South pointed out that they were not very pleased with this new instance of patronizing behaviour. This made quite an impression on the public, driving home the point that hacking is not as a purely Northern middle-class spoiled male kids phenomenon, but an universal issue. In fact, considering the levels of repression and the issues at stake in the South, it is pretty well arguable that the real hackers are to be found there rather than in the North.

So we made contact with Worknet in Johannesburg, South Africa., and through them we were able to reach the following groups: Work-place Information Group, Labour and Economic Research Centre and Labour Research Services, and Cape Education Computer Society.

What are you using computers for. was the first question asked in Paradiso.

The answer was clear: "Worknet is a grassroots communications system serving the Anti Apartheid movement here", in South Africa.

Paradiso participants also raised the question whether in their opinion, the real hackers were to be found in the South? They could agree provided hacking was defined in the general sense of progressive use of computer-technology. The NGO- participants in South Africa stressed that electronic-mail services were still limited there, but were growing fast, because private business is very hooked on them.

The South African authorities have been unable until now to interfere with the network itself, but they do have come down on various users. Many case of suspected arson seem to have been committed with the purpose to damage computer installations (which are very delicate)

The South African NGOs explained also that they are using e-mail especially because it is fast and cheap.

The audience in Paradiso also raised the question about what role e-mail has for obtaining information which normally is difficult to obtain The South African NGO's answered that with e-mail they have an unique possibility to get information from various international agencies, otherwise not available in South Africa itself (we guessed because of state censorship). And they themselves are now able to send information

to other countries, which would be very difficult otherwise. Also of importance is that quite some progressive literature cannot be printed in South Africa, but with e-mail a new and effective tool for disseminating this information has become available.

Another question raised was: is computer technology introduced to community centres in South Africa? Yes, definitely, especially in the main centres. Some 'educational computer societies' are running courses to teach people computer basics. But also in rural areas, hitherto not well connected, computers are being increasingly put to use.

In the basement the now well oiled machinery of workshop went into gear again, but this time with one lone, but nonetheless heavily "booked" presentation on the "Cyberpunk" theme, by Lee Felsenstein and Arjen Mulder as a representative of the BILWET/ADILKNO. Report:

CYBERPUNK - a practical approach.
(Lee Felsenstein and Arjen Mulder/BILWET).
by Bernd Fix

(This workshop was also one of the best attended in the conference. About 50 people listened and took part in the discussion)

First speaker Lee Felsenstein stated that as far as he was concerned, personal computing developed as a real punk phenomenon. That means that before the industry had realized it could make money by selling PCs. People had them build because they were fascinated by the idea. They did not think with PCs which could be of immediate use- and indeed PCs were good at practically nothing at that time. It was more a sort of rebellion against the corporation of computer priests running around in white coats in air conditioned computer halls, serving massive mainframes. The inventors of the PC concept wanted to get "forbidden knowledge" - and to spread it . In this sense they were true designers - people who do things without asking questions such as whether they would work or be of any use.

As an example Lee talked about "designer viruses" he had spread. A design can behave like a virus that propagates by improvement. Lee is the inventor of the 'memory mapped video display' that is still used in vdu's (video display units). As a new approach to video displays he introduced the idea of "high suggestivity displays". Most of video manufactures today try to increase resolution and size of a vdu to get more information displayed at the same time. In contrast to this Lee tries to increase the "information content" of a display by using symbolic elements to transfer information. "What you see is what you imagine to see", he said. You 'see' more than there is on the screen because you 'see' with your mind and not with your eyes. So for him the best way to improve the visual interface between man and machine is the

enhancement of the imagination of the user rather than a 'better' and therefore more expensive display.

Video displays are also the ultimate possibility for illegal computing, Lee continued. If you program a vdu in a certain way you can create psychodelic effects - video drugs he called them. So maybe in the near future, government will ban illegal video drugs, he quipped. This should enable us to get down to illegal computing again - and that's what we need if we want to keep hacking attractive for young people.

Arjen Mulder from BILWET (the Amsterdam Association for the dissemination of Illegal Science) explained what the term CYBERPUNK meant to them. 'cyber' is taken to be the mystical moment of computing - the unpredictability of the future. The 'No future' slogan from the punk generation expresses this quite well.

Cyberpunks are not interested in useful communication, they are just rushing into system, eventually crashing them and then leaving again. So their behaviour may be anti-social - but for them it is fun. This points towards a third possibility for the development of today's hacking: Instead of playing the security-intrusion-game again and again or drafting a re-actualised version of the hacker ethics, tomorrow's hackers may have a 'no future' mentality in common with today's punks. For them total communication is the same as no communication at all. The only important thing for them is to find the alien in the computer - the unpredictable moment in a complex system - and their physical body in the event they are able to return from CYBERSPACE.

These points were not lost on the public, which settled for an afternoon open chat on hacking and business. But not too much of it, as the ad hoc link with South Africa had already bitten quite some time out of the programme, and the urgent business of drafting the ICATA declaration had to be taken in hand. The task to organize an orderly yet broad based and inspiring discussion fell on the morning Amsterdam panelists, Lee Felsenstein, Michael Polman and Patrice Riemens. Lee had produced a "pocket" declaration which was promptly endorsed:

"Whereas democratic society is based upon the right of everyone to access public information and the right to associate freely, and,

in recent years technical structures have developed to handle such information which obscure accessibility to the information through complexity, and,

such technical structures also serve to isolate people and defeat their right to association.

Therefore, we assert and declare.

- The right to discover not only all public information, but also the functioning of the mechanisms by which this information is collected and

processed; - The responsibility to avoid harm to others while exercising this right of discovery, and - The right and responsibility to pass on knowledge and skills which serve to reveal the function of the information processing mechanisms while guarding strictly the confidentiality of information which has been entrusted or surrendered to such mechanisms by private parties.

- NO TO INFORMATION SOCIETY, YES TO INFORMED SOCIETY."

The lengthier main declaration went through several readings, with the audience quite unable to sort out the essential points from the less essential ones and to resolve the inherent ambiguities and contradictions...which was exactly the purpose of the document. The ICATA declaration should not be read as yet another portentuous and emphatically phrased showpiece as are churned out by the score in various fora world wide. It should rather serve as a breeding ground of diverse ideas and opinions, a kind of tool kit where people who are confronted by, or are confronting computers in various ways can take the cues they want and find inspiration. Also because of that, the various additions have been retained as they were, and even more related opinion pieces can be found in the annexe.

As if to enhance the intended fuzziness of this drafting process, the conference was hit by massive disruption that afternoon. At around 15.45, as some contentious issue was discussed (but in no way resolved!), a telegram was put on the panelists table; notification was given that due to a massive abuse of allegedly stolen NUIs, all Paradiso telephone lines would be cut off by 16.00, by order of the telecoms, it read. While it turned out to be a (very smart) practical joke - the in-charge signed "P.H. Rieking"! - it instantly conjured up all nightmares of state-sponsored repression dreamt by the hackers present.

After these emotional scenes the ICATA declaration was adopted in a cheerful, if somewhat chaotic atmosphere. Then Paradiso was quickly emptied and the technical crew threw itself into the job of clearing the building (or at least the main hall) out of all possible electronic devices to make place for the evening farewell party with a lot of mind-cleansing Rock 'n Roll by the famous Amsterdam band "Cross your Heart & the Playtex".

PART II

SUPPORTING TEXTS

The computer as a tool for democracy **By Lee Felsenstein**

1. The responsibility of technologists in determining the political context of their developments.

- Incident from Berkeley 1964 Free Speech Movement illustrating the dependency of political activists on design decisions made by technologists
- Technologists make choices which define the boundaries of political actions
- With power comes responsibility. As technologists we must embrace our responsibilities in this process and work to include all citizens of our societies in the process.

2. Hierarchy is a very powerful myth.

- The "Information Age" has existed since the introduction of the written word.
- Previously, power was exercised by direct physical threat. The headman was the one who could vanquish all others.
- Power in this situation is seized by the headman.
- In the information age, the physical threat is exercised by proxy (the police function).
- The headman is the one who controls the channels of information through which the police accept their orders.
- Note that in this situation power is given to the headman by the members of the police branch.
- The hierarchical structure provides the framework upon which this control of information is structured.
- The excuse is efficiency ("someone has to be in charge").
- No organization can operate along strict lines of hierarchy. Ask anyone who has served in an army.
- Human organizations that work do so because people set up "longitudinal" or "horizontal" information channels through which necessary information transfer occurs informally. Ask anyone who has served in an army - and that has been effective.

3. The Agora - the commons of information.

- The society of atomized, isolated individuals exists only as part of social pathologies (anomic life in large urban societies).
- Traditionally, people in all cultures organize life in village structures.
- Villages are created around central gathering places

Agora is a place where political and commercial transactions are carried out in public

- where people "hang out"
- where people get to know the others
- a free field for horizontal information exchange

The Agora Function: the ways in which people create a situation in which horizontal information exchange can take place.

4. Urbanization - the destruction of the agora function

- the enclosure and privatization of the commons
- agricultural commons
- the commons of information
- physical space as a private commodity
- time as a private commodity ("time is money")
- the development of increasingly centralized information transmission structures.

"Broadcast" structure: information is transmitted:

- identically,
- in large quantities
- in one direction

"Non-Broadcast" structure: information is transmitted:

- from one to one
- with reverse channel
- with no hierarchy of control

When allowed a stable environment over time, people in dysfunctional urban societies tend to act to restore a common life:

- neighbours keep watch over public spaces
- comfortable street life develops
- anomy decreases

(see Jane Jacobs, "The Death and Life of Great American Cities" 1961)

5. Participatory Democracy and Information technology

"Participatory" as opposed to "representative":

- requires a replacement for the hierarchical structure-myth
- technological elements are present

- the hierarchical power structure will not initiate its own replacement consciously
- as technologists we can exercise our responsibility to implement tools for non-hierarchical society:

- Reconstruction of the Agora
- Empowerment of the Agora Function

Available non-broadcast media:

- Mail
- Travel (face-to-face conversation)
- Telecommunication

"Directory Function" is missing (capability for secondary information):

- primary information is content of transmission
- secondary information is used to locate the desired communication partner.

Telephone directory, e.g.:

- Homebrew Computer Club "Mapping Session"

6. Community Memory

- a network of computer-driven "living directories"
- works as secondary information capability for existing telecommunication system and other non-broadcast media:
- "Hypertext for Graffiti"
- Optimized for small data items (4k)
- Networked data structure
- Comments can be endlessly added to comments
- Index word searching available
- Affordable by moderate-sized organization. Systems can be interconnected in centerless networks.
- Walk-up public terminal system has been re-established in Berkeley after a four-year pilot trial.

Purpose:

- to provide a tool for the formation and re-formation of communities
community defined as a group of people who communicate on a regular basis:

- communities can overlap
- each person can belong as a member of several communities

Finis: "Idiocy of Village Life"

7. Conclusion and Summary

The technology exists through which the myth of the hierarchical organization structure can be put to rest. This will be done through consciously empowering the Agora Function in telecommunication space. The widespread availability of the Agora Function will create the possibility of a transition to a post-hierarchical or participatory democratic society.

THERE ARE NO MECHANISTIC GUARANTEES! Merely the possibility verging upon a probability.

What is crucial is the understanding of the concept of secondary information and the role of computers in handling this information. The concept is NOT one of a "global computer conference" which is still tied to the hierarchical structure myth.

Our computer and telecommunication structures must resonate with the traditional human values which form part of the "cultural genome". This will not be done through the agency of hierarchical structures and myths.

We technologists have never shrunk from doing that which is considered impossible. We have the opportunity to accept our responsibility and transform society.

Some statements about the interaction of mind and computer

By Luc Sala

The mind and the computer have more interaction than most users or even developers are willing to see or to admit. Psychology has barely touched upon the subject and the philosophy about it seems to come from the hackers rather than from the scholarly establishment .

The computer is becoming the definite extension of mind in the M.McLuhan sense, but if we believe that mind and body are integrated, we might find many more illnesses and cures from and with the computer than expected.

There is little news in an overflow of information in society. In the past civilisations have usually found solutions to that by condensing information into myths and fairy-tales, social organisations and behaviour patterns, and religion.

Most of the so-called productivity-software has the characteristics of a frightening straightjacket, limiting instead of enhancing creativity and serving the (formal) organisation rather than the individual needs.

The spreadsheet (and many other business software) is a form of self-hypnosis, or, as Jerry Pournelle has it: 'The spreadsheet is a ritual'

The subliminal, the sub- en unconscious content of software is mostly invisible and goes undetected or unsuspected, even unintended, which means there is a grave dangers. Manipulation becomes a distinct possibility, and is probably fairly easy to implement (e.g. Navigator).

Software is specially made and adapted for the company characteristics and specifications, but we see very little adaptation to cope with the differences between individual users and their psychological and fysiological needs. (The mouse/keyboard choice is about the maximum in this respect).

The man-machine interface is not inherently limited and could involve all chacra's instead of only those connected with the brain/thought. Dildonics for one is totally ignored, so is the ESP interaction with computers, or the effects of hallucinogens on programming and computer usage.

Programming is, officially at last, totally based upon the mechanistic, Western rationality, the cause and effect approach and rational philosophy. Esthetics, religion, intuition, spirituality, are no doubt part of it, but only as an underground, an invisible influence on the individual developers.

The computer-mystic will be a major phenomenon of the Third Millennium, today's hackers are the forerunners, seeking a new path to spiritual liberation.

It might be that the total scientific and rationalistic modern science will ultimately prove to be a gateway to a higher level of consciousness, a new way to the Ultimate Reality we sometimes call God.

The ideal and ultimate "hacker" will communicate directly with the machine or the networks, without being disturbed by mundane interfaces.

If we assume negative effects of computer interaction, there are bound to be positive influences, to be mobilized to neutralize the negative and therapeutically help users to become healthier, more integrated people.

The "hacker" could be idealized as a modern interpretation of the archetypical revolutionary, but also as a frustrated "player of life".

In a psychological sense, both approaches are defensible and realistically explicable.

In the same way a computer-virus can have a signalling function for the impact of informatics on society, there could be deliberately negative, criminal, or even fascist programs for the purpose of warning the world for the impact of computers on the psyche.

Scarcity of Information and New Initiatives in The Netherlands

By Peter Klerks

My name is Peter Klerks. I am a Dutch political scientist. My main field of interest is the study of police and security services and their influence on society. On this subject I recently wrote a book, "Counterterrorism in The Netherlands". I also research problems concerning freedom of information and the protection of privacy. As the time allowed to me for this speech is limited, I will limit myself to pointing out the major themes of my work. I hope we can go into more details in the debate later on.

Working as a researcher on the police I often get confronted with the problem of how to get to the relevant information. A lot of material is very superficial and repetitive. Relevant information is often simply not available in the open. I think it is remarkable that some of the more interesting parts in my book (or if you prefer, the scandals) are based on material that was stolen in several 'civic burglaries' by action groups in the past years. If you are inclined to distrust the authorities you might conclude that a lot of what goes on cannot bear the light of day, and is screened off by secrecy and fog-banks.

One example could be the development on a Europe-wide scale of the cooperation between national police and judicial authorities. Some very important decisions are being made there, but most of the negotiations are kept secret, and even the parliaments of the various countries are only superficially informed despite their protests. Every time some document or other is leaked out, it invariably contains very controversial material. Last year for instance a classified draft-treaty came to the open which contained proposals to make even indirect attempts to give aid to "illegal" refugees punishable.

What goes on in these European consultations should be the subject of a political debate in society as a whole, and any decisions should only be made after thorough considerations, research and consultations. What is going on in the matter of drug abuse control policies, foreigners registration, identity controls, extraditions and the built-up of a European police databanks is just too important to be kept under such secrecy.

So far my story has not been so much about computers as about information. With these examples, taken from my research experience I would like to illustrate that information is a strategic commodity, and one that can hold great value at that. The possession of information and the opportunity to keep it secret has everything to do with power. Just to give a small example of a totally different kind: during the Chernobyl-disaster everybody was anxious to know how bad things really were. Various national authorities in Europe then withheld relevant information from the public, or, like the French government, manipulated it. On the other hand there were independent environmental groups that performed measurements themselves and distributed their results through bulletin boards to whoever was interested. The measuring of radioactivity is a relatively simple technique, and in that case a form of counter-publicity can be most effective. But environmental pollution often is a very complicated matter. It would be useful if readings for hazardous elements in the air and water would be published continuously, for instance via ceefax (=teletext). At the moment in Holland something like this already takes place on a small scale with distribution via Viditel (=viewdata), but this costs money and it is certainly not accessible for everyone.

Often the cost factor plays a crucial role to limit access to information. A few (Dutch) examples: logging on to the the parliamentary computer catalogue (PARAC) is quite expensive: at 6 guilders (\$3.00) a minute, private persons cannot afford to do this. The same goes for the chamber of commerce, for data banks from press bureaus and newspapers, for judicial data banks and various others. The problem really is not new. Some years ago all the information used to be stored in books and periodicals, and they also cost money. But then at least you could turn to a library, and with data banks this free access is no longer possible.

Maintaining a data bank costs time and knowledge, and of course sometime somebody has got to pay for them. But it is important to stress the fact that the data and knowledge from data banks are nowadays often the key to political and economic power. A system where information equals money and

information is withheld from people without money or connections imparts access to that power, and limits seriously the possibilities of control over it. As long as you do not represent a company or institution, you get nowhere in network-land.

However it would be wrong to give only a negative story on these matters. There are also some beneficial developments taking place. Because there have been a lot of action groups, critical scientists and assertive civilians around in the past twenty-five years, the importance of accessible information is now widely recognized. In the Netherlands as well as in other (Western) countries, laws have been made to improve access to governmental information. But still too often you need a lawyer to get what you want.

Governments themselves are more active in providing information. Directives and regulations are almost always available to the public in the Netherlands, but it often takes a professional to find them. Most of the environmental data are accessible under the Dutch Freedom of Information Act (WOB). The municipal environmental laboratory of Amsterdam has become more accessible to ordinary citizens. Public libraries are experimenting with reduced fees for the access to various data banks. The Netherlands are not staying behind in this field, but there remains a lot to be accomplished, and information technology does not necessarily make things better or cheaper. Personal data for instance are being better protected in our country nowadays than they used to be a while ago, but at the same time they become commercially more and more interesting, and easier to process in various ways. Computerized shopping systems, electronic money and new surveillance techniques make it possible to keep better track of your most personal behaviour and this type of social monitoring easily can get out of hand if the political body fails to take decisions in the matter. It is up to us (hackers,red) to keep a watch on what becomes technically possible and prevent what we don't like to happen.

As a good example of a Dutch initiative to do something for a better distribution of useful information I want to tell something about an experiment with a bulletin board system (BBS) with which I got involved. In the autumn of 1987 several people who were working in progressive research on social problems came to the conclusion that a more structural way of exchanging information between them had to be developed. Because several of these people had already been using computers for data and word processing, it was decided to form a BBS. After a while someone found some money, an Atari 1040 with harddisk was hooked up to a modem in Rotterdam, a couple of people formed a sort of editor board and in march 1988 De Zwarte Ster (The Black Star, TBS) was in operation. In the early days only a small group of people used the new BBS, but because more and more people obtained computer equipment and thanks to the on-going publicity campaigns from some fanatic system operators the fame spread. People that didn't belong to the in-crowd became regular users.

Meanwhile TBS has more than proven its value. Getting the right questions answered by the right people is quite efficient now. AMOK, the Utrecht-based

anti-militaristic research group, for instance puts in a message asking for information about a certain company that trades arms to Iran. An action group on the Rotterdam harbour reports that it knows the firm to have traded to South Africa as well. Somebody else with a friend at the chamber of commerce provides an overview of the company's structure, and here are the basic ingredients for another hard hitting article. It should be noted here that all services are free as a matter of principle.

Data bases of companies that trade with South Africa, that are involved with nuclear energy activities and other basic materials are always available. Also news messages on various actions are immediately available on TBS. Activities of extreme right organizations for instance are being reported in detail, demonstrations are being announced, movement-related magazines like NN (Amsterdam) put their articles on the BBS and interesting news from foreign or obscure media and professional periodicals are frequently being send to TBS also. People draw attention to good articles or interesting programmes on radio and TV. It is a bit like like coming frequently to your favourite journalist's joint, only you don't know everybody by face and you have to pour your own drinks. Lately more "conventional" groups like Greenpeace, Milieudefensie (the Dutch Environment watch, red.) and committees on Southern Africa have also begun to report their news on TBS on a regular basis. And last but not least an exchange has been started recently with German and Belgian BBS's that have more or less the same background. That is why part of the BBS is in English nowadays.

As a BBS grows, new problems come up. Methods have to be found to prevent people from drowning in information. It should be clear even for a novice caller what kind of information is available, how to send and receive messages and most of all how to prevent kilobytes of text scrolling on your screen you don't give a damm about.

A BBS that wants to offer more than just software and silly jokes has must confront the problem of how to maintain a certain identity in much the same way as a news magazine has.

The first thing that becomes clear when logging in is that TBS does not offer any software, which makes a lot of computer freaks log out immediately. This probably prevents a load of nonsense coming in. To prevent the BBS from becoming sectarian all the same, the system has to be very clear and transparent, thereby making it accessible to people with very different socio-political backgrounds. So far TBS has managed to get radical activists and professional lobbyists working on the same system, which brings up most interesting discussions every now and then. On a lot of subjects everyone has an opinion to give. I remember the flashing debates on the Rushdie affair on TBS. Very different points of view came to be confronted with each other in this way.

TBS is far from perfect. While nowadays it is operating on a 2400 baud modem, it has still only one telephone line. The costs for long distance calls are pretty high, and might form a barrier for some users. And the other night the thing that every sysop fears most happened to TBS. Dust provoked a short

circuit, and the harddisk was destroyed. The BBS was out of order for weeks, and all files and messages were lost. That meant starting all over again, and only now things are starting to function a little like they used to. TBS does not charge its users anything, so money remains a constant problem. But the system functions, and I think it will only become more important in the future.

BBS De Zwarte Ster *

The Black Star * 010-4365200 (300/1200/2400 N,8,1)

Fascist computer software in West Germany

By Suzan Ugursoy,

Chip Generation/ICC, Köln, Germany.

We in Germany all knew for a long time that fascist computer games were spreading around but as Turkish people we encountered difficulties in getting hold of them. Two of us managed to get copies of these games through German friends. These games were called "Adolf Hitler" and "Hitler Diktator", and so we got an opportunity to have a look on such computer games. More research showed us that these two games were by far not the only fascist computer games on the market.

We call computer programs with a racist or extremist, right-wing intentions "Nazisoft".

The people from the extreme right in Germany misuse the modern communication technology; nowadays the neo-fascist ideology is spread among young people by diskette.

One example: During the last six month there have been about 600 police investigations against people who spread fascist computer games on school campuses in (West) Berlin. At the same time they also use mailboxes and bulletin boards to spread such computer games. Today right wing groups are looking for people with knowledge of computer technology. This is the reason why we believe that organized right wing groups are behind the development and spread of such fascist computer games.

A new misuse of the new technology could be noticed during the last elections in Berlin: The election campaign of the "Republicaner" (a newly founded extreme right party) also made use of bulletin boards.

We must do all we can to stop the spread of fascist ideology. If young people get accustomed to racist ideas - and their number is growing by the day - there will be more and more attacks against people of non-german origin in Germany. History gives us every reason to be afraid of such developments.

We organize various activities against the advances of the extreme right thinking. One of these was the foundation of the ICC (International Computer Club) bringing together young people of German and Turkish origin. Our aim is to stop the spread of Nazisoft and the misuse of the new computer technology.

One important thing we do is to make people aware of the existence of Nazisoft and what it stands for. We hold seminars and discussion rounds with parents and teachers to discuss the danger behind the fascist computer games.

But we also have to develop alternatives. So we work together with many bulletin boards in Germany. In some of them we have our own boards, so we can inform the people interested directly. We are also trying to get in contact with other bulletin boards in Europe. Our aim is to use the new technology to reach an understanding between the people from all countries, not separate them.

You won't achieve very much by simply prohibiting fascist computer games. The "Bundesprüfstelle" (state prosecutor, red.) put these games on the index, but nothing happened as nothing else was done. We think it is much more important to inform the people in Germany about people and their culture in other countries and to develop understanding. Also it would be helpful to develop and spread appropriate computer games for young people.

I am against "censorship" in any form. If you are living in the West you would easily believe that you have more information at your disposal than you really need. But in fact, we can only read and hear those things what we are allowed to see and to hear. Censorship is everywhere. The power of press agencies in this respect should not be underestimated. Therefore a bulletin board like the Green-net can achieve a lot in a positive way.

Information in itself cannot be a threat. But it can become a threat if it contains lies. And there the problem arises. But by spreading correct background information you can fight these lies in the best way.

(July 27, 1989)

The right to interfere

By Werner Pieper

Since 1971 I have been working as a one-man venture under the name 'Die Gruene Kraft - Medienexperiment', which means Green Power/Strength. I am a writer, publisher and networker. Not a computer networker, but a weaver of new social nets.

I do my best to publish information otherwise not available in Germany, like books about the creative use of drugs & technology. Among other things I was the publisher of the 'Hackers Bible', compiled by the Chaos Computer Club from Hamburg.

As a 'traditional writer I do not have very much experience with computers, so I will rather talk about my experience with the printed media, peoples' networks and information dealers.

In 1965, still in high-school, I published a paper in which I demanded the political recognition of the German Democratic Republic (East Germany) by

West-Germany. The magazine was confiscated by the authorities and burned on the school ground. This gave my self-conscious a big boost. "If they burn my magazine, they must be shit scared of me". So I took the threat of the authorities as a proof of being on the right path. Twenty years later I found out that the police were still maintaining files on me in their computers.

Life in the Federal Republic of Germany is experienced by a lot of people as a living under constant repression - compared to life in Holland. I like that situation, because it motivates me to work in a what I hope is a better direction.

There is a lot of information to which the German political system reacts to as if it was threatening to its existence. Political systems are basically interested in maintaining the status quo. But people are more interested in improving things.

A lot of pressure is applied on the status quo forces in society by the environmental movement for instance. I believe that human beings should have more rights, e.g. the right to decide for themselves how to use their own brains - even if this is done with the help of drugs.

Once in a while some disasters hit the front pages, but we do not really know what is happening. The authorities lied to the people who were concerned about the radiation levels after the Chernobyl.catastrophe This happened not only in Eastern Europe, but with us in the West as well. In my opinion it is not only a right, but everybody's obligation to get the information about radiation and so forth, and tell other people about it. Even if this involves 'illegal hacking' (from the authorities' point of view).

The public has the right to know all information about Salman Rushdie, except his current address. I can understand and partly support people, who put Exxon under threat after the oil-tanker crash in Alaska. May this be a threat on the information level (hacking etc.) or material level (sabotage). Similar actions against multinationals and/or military craziness may be seen in the same light.

Everybody has a right to find out for him or herself what his or her limits are. "A hacker, in the merging definition is anyone who pushes the edges of the possible and the permissible." Quoted from Stewart Brand in Signal.

We have, compared to most people in this world, a lot of freedom to check out on our society. Every action we take to improve society, be it by way of child education, computer hacking or selling of psychedelic drugs, we must take seriously. We have to be aware of the consequences for ourselves and society in general.

I have the feeling that on this congress, despite it being about computers, most information is told in the old Indian way: face to face.

If young and dynamic kids, without very much knowledge of life on this planet are hacking (like selling information to intelligence services, which of them doesn't really matter) or do other crazy things, we have to accept that as a part of the future. There is no way to stop them. Be prepared!

There is no ideal solution to this problem. So opening up all data is only the second best solution. But this is still preferable to having a government or a multinational having monopoly control over personal data because then there is always the possibility that it will be used as a means of power and as a threat to the individual.

The opening up of databanks also means denouncing copyright for articles like this. I love being reprinted, so feel free to do so.

There is no copyright on what I write.

You are welcome.

Thank you.

From the North to the South and back again. By Patrice Riemens.

To the already long list of Western (or "Northern") imports which have come to, or are being imposed upon the "Third World" (henceforth "the South"), the computer has been added, together with its attendant technology and "culture". Is it a blessing or a curse? There are simplistic and elaborate arguments for both points of view, and there are of course various shades of "in-between" opinion. The influential albeit cohorts of single-minded modernizers, together with the powerful proponents of "market-conformity" and capitalist development have no trouble at all (to say the least) with computers: they are part and parcel of "progress", indispensable tools for fast communication, one, if not the backbone of the modern, global economy. Critics of the capitalist system and its "technostructure" are equally positive...about its merits: the social and economic disruptions (think of job-destruction, de-qualification, and various forms of control) computers are causing in the North become an outright nightmare in the South as countries desperately try to "keep up" with a costly and possibly alienation from an un-adapted, dependency-inducing technology. But there seem to be some misunderstanding there, which might be traced back to a monolithic view of computers in general. On the hardware side it is important to distinguish between big "number-crunchers" and personal computers (PCs). Whether the former are the domain of "the rich and mighty" the latter have tremendously boosted the communication potential of private persons and small organizations. In the same vein, a clear distinction should be kept in mind between the task-orientated, unquestioning technocrats and critical, concerned computer-minded individuals (aka "hackers") who over the years have come up with a vast number of applications and "tricks of the trade" which have truly democratized the use of computers (one should realise that the PC itself was a hackers invention, that has literally been forced upon a reluctant industry which is now utterly unable to control all its developments). Nowadays, the extension taken by data-networks, especially in the South, indicates that the discussion about the appropriateness of computers in

general for the South in general is a passed stage, and so is what might be termed the "ceteris paribus pessimism": even in the prevailing socio-economic circumstances at the local and global level, computers can prove a powerful - and affordable - tool of social change, economic uplift and political liberation. But for that, the right knowledge must be disseminated and the right alliances across the national, social and cultural divides must be struck. Power is as unlikely to come out of the screen of a computer as it is to come out the barrel of a gun... but these tools, put in the right hands, do help and should not be ignored.

The following text was send to the ICATA from Uruguay by e-mail:

[Message no.: 13 Message from: CHASQUE Subject: PANCHO VILLA & E-MAIL (SKIP PREVIOUS) Sent on: 02-08-89, 22:39:37 Receivers: ICATA89 INTERDOC-DEMO]

**LATIN AMERICAN SOCIAL ACTION AND THE NEW
COMMUNICATION TECHNOLOGIES
(or "Pancho Villa showed the way")**

by Roberto Remo Bissio, editor, Third World Guide.

In the early 1914 Mexican peasant revolutionary armies in the northern state of Sonora (bordering Arizona) were marching southwards from Hermosillo to Guaymas in their fight against the US backed "federal" government of Victoriano Huerta.

Pancho Villa, Alvaro Obregon and other revolutionary generals used to march by train. Those very same American and British built railroads that in the three decades before brought capitalism into the Mexican countryside, forcing thousands of peasants into starvation or forced labour, were now carrying peasant freedom fighters, their arms, their horses and their women (it was a people's war, and no people's war was ever fought without women taking active part).

But the federals had a strong hold at the town of Empalme in their way to Mexico City. To siege and take Empalme would take precious weeks, lives and ammunition -all of them scarce.

To abandon the train and continue the march riding horses through the desert was impossible. The revolutionaries solved the problem by making the train pass by the town instead of through it. They took 500 meters of rails from behind and placed them in front, so that locomotives could advance a little and the procedure was repeated again and again.

Terrain had to be levelled and water tanks were built on the 10 miles way. Thus in 15 days the troops circumvented the city and continued the march without firing a shot.

The revolutionary leaders probably would have never thought of pulling the train where there were no rails if they were not illiterates and had been more familiar with the logic of those machines. According to Trotskyite historian Adolfo Gilly, "when the train took normal rails again, it had materialized, in a peculiar Mexican way, Marx's saying that revolutions are the locomotives of history and they may pull trains where there are no rails".

The modern information and telecommunication technologies put us Latin Americans in front of options that might be similar to those Villa had to face. Microelectronics plays in the last quarter of the XX century the role that trains played 100 years ago: the tools of foreign domination, they are a consequence and a cause of capital and power concentration, resulting in less independence for our countries and more misery for our peoples.

Shall we condemn the instrument or learn to use it and make it a tool of our people's struggles.

The Third World would probably be better off if there were no computers -no trains, also-. Ecologically sound ways of living were firmly established in America when Columbus arrived half a millenium ago. The quechuas had an advanced computing system -the 'quipus', where bits and bytes were knots (or the absence of them) in cords- that allowed to control food distribution for 15 million people, roughly the same of malnourished present day Peru. And they also knew the wheel, but were wise enough to use it only in children toys. But the fact is that horses, trains and computers ARE HERE. Trans-border data flow made it possible for banks to take five billion dollars away from Mexico in two days in the early 1980. Big frame computers allowed the military in my country, Uruguay, to classify EACH AND EVERY INHABITANT (three million inhabitants) into categories A, B and C (loyal, neutral -eventually suspect- and enemy). One year after 1984 democracy returned to Uruguay, but the files were never deleted -not even found- by the civilian government. Under threat of a military coup parliament passed an amnesty for human-rights violators and more than 25% of the electorate (yes, one out of every four citizens) dared to sign a petition against the law, a task that would have been impossible without the aid of a dozen of PCs and a group of committed computer experts.

Latin American 'hackers' like those were able to stop electoral frauds in Brazil, saved lives in Colombia with fast international voicing through e-mail of alerts sent by human rights organizations....

We developed hyphenation algorithms in Spanish and linked 48k AppleUEAE computers with main frame typesetters to publish alternative reference books years before the term desktop-publishing was coined. Our present access to international e-mail is shared by several organizations (human-rights activists, feminists, co-ops promoters, scholars) and we are now planning to set up a host for a national network. Our major difficulty is not to convince poor farmers federation that PCs may be of use to them, but to persuade First World donors that an AT compatible might indeed be appropriate tech for them.

Yes. Global electronic data flow is the nervous system of present-day transnational capitalism, as railroads were the veins of 19th century imperialism. But we still might find some use in them, since they are there, as Villa did. Particularly if we have the ingenuity to circumvent established procedures and make them work according to our own needs.

Villa eventually won many battles, the revolutionaries won the war, but the peasants ultimately "lost the peace". Among other things because their leaders had no idea of what to do with the trains -and the economy and social relations they carried- when the war was over.

If we had the ability to look at 'new techs' in new ways, like Villa did, they might speed up our march. But it is up to us to determine where we are marching to.

(This is a revised and updated version of an idea first presented in Penang, Malaysia, in November 1986 at the Conference on 'The Crisis in Modern Science' organized by the Third World Network and the Consumers' Association of Penang)

PART III

PAPERS PRESENTED TO THE ICATA'89

Data protection in a Hospital Information System by Daniel de Roulet and Constantin Jornot

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ABSTRACT

After a definition of HIS (Hospital Information System) and of its benefits, the different strategies which are elaborated to protect the HIS are analyzed and criticized. It appears that all strategies founded solely on a technological escalation inevitably become obsolete. The most credible data protection is based on an approach which involve explicitly the environment of HIS. Primary issues are what has to be protected and why it has to be protected, according to a non discriminatory ethic.

1. INTRODUCTION

The problem of data protection is not the same in a hospital environment and in the banking industry. First, the data which are collected (in an informatic way or not) are particularly sensitive in a hospital. They refer to the most intimate part of the person. Second, the people who collect or organize the collection of the data have generally high social prestige.

For these two reasons, the legislation on data protection in a hospital environment is specific and access to data more restrictive than for other data [1] (except for police data, and this is another question). For the moment, we can say that the cases of unauthorized access or voluntary destruction of data in a hospital environment are limited. In order to perpetuate this situation a certain number of considerations have to be made.

2. DEFINITION

Since the end of the seventies several big university hospitals throughout the world have developed a HIS, a system which makes possible not only the solution of problems of the daily management of a big enterprise, but which offers to the medical and nursing staff help in their work with regard to the complexity of the sub-systems in which they are involved.

The most elaborated HIS are today focused around a central data base of patients and they are processed in real-time.. They offer at any moment a general view on the location of the patients (their move from one ward-unit to another) or about the treatments which are to be or have been carried out (lab work and x-rays). Such a system is a lot more than an administrative system like the one you can find managing a private practice or single clinic [2].

Among the new functions that HIS will have in the nineties, will be two major ones: the numerical imaging (PACS) and the computerized processing of the medical records [3].

For the moment, the data which are stored in a HIS include.

- detailed identity of the patient - history of his movements in the institution - his pathology - the results of his lab and imaging tests

3. BENEFITS OF THE HIS

It is very difficult to analyze the HIS in terms of costs and benefits. It can be said that the HIS diminished the duration of the hospitalization of the patient which in turn means the cost, but this is probably not relevant. It could be said that HIS diminished the work of the people on charge of treatment permitting them to have more time for the patients. It has been said that the HIS facilitates communication between distant members of a gigantic hospital community, enables the reduction of the size of the administrative staff and makes possible the calculation of the costs of care, and so on. All these benefits are partially true, but they are also a posteriori justifications and they show variations according to the people to whom they are presented. Other presumed benefits which were presented at the beginning of the installation of the HIS, like the reduction of paper or the quality or exactness of data turned out during the history of HIS to be unfounded. Finally, the only good reason which remains for the HIS is that it manages the complexity of an institution for the benefit of the one figure which has to stay central: the patient. This point is very important and its in itself justifies an analysis of HIS unlike that of any other information system.

4. THE THREAT AGAINST THE DATA OF THE HIS

The few truly integrated HIS which exist in the world have made themselves so indispensable that their operation has to be guaranteed 24 hours a day and 7 days a week. It is now recognized that the breakdown of such a system for more than a week would definitely compromise its existence, not to mention that of the institution and of the patient, which is of course the most important thing.

In order to analyze the man-made interventions against a HIS, we have to consider who is at the heart of the system, the patient. The following list of potentially dangerous actors is made here without any moral a priori. They include.

* the insurance companies, or generally speaking the organization which pays

the cost of hospitalization. The insurance companies are particularly fond of lists of patients whose pathology has become too costly (in order to drop them) or, at the opposite end, patients who are a potential source of profit. They are interested in an in-house reproduction of a subset of the HIS in order to compute in detail future costs and immediate profits.

* the mass media. Reporter curiosity, always on the alert for a scoop, would love to know the name of some celebrity patient which would increase their reading or listening audience.

* the employers. The working force has to be in good health when it is given a salary, but is has to be free from any long term threat like a degenerative disease or HIV positive status.

* the patients themselves. Even if the data have been collected with the maximum of quality, it can appear to the patient that a fact about him is not exact, past or no longer true. He fears that it would come into the public domain and he wants to be sure of its quality or he wants to control its existence.

* the authors of the system (computer people) or its frequent users. In this case, the relative access facility creates the possibility of fraud. At the moment of hospitalization of some relative, it can happen that this category of staff member makes a bad use of his right to access.

* those who attack data systems in general and are not particularly interested in either the HIS, or the patient.

Each of these categories of persons who can interfere with the HIS data don't have the same chance of success. The known cases demonstrate that the most privileged are the computer people themselves. Brute force is powerless against them.

5. PROTECTION STRATEGIES

Against these threats, the operating managers of HIS have elaborated three kind of strategies.

The first approach, historically the first but also the most common is the security approach which can be described in a caricature way as "security paranoia". It consists generally of a set of measures which privilege the physical protection of the central site and counts on hardware gadgets and on a "check-list" management of the operation of the system. This strategy has already been criticized [4] not because it does not work (it still is very dissuasive) but it does not take into account the specificity of the HIS. It is not possible to protect the HIS with the same motivation as the Vatican Bank. More over, two factors of the technological evolution, miniaturization and network architecture, make this strategy a permanent commitment to new costs for protection equipment. On the other hand, the use of artificial intelligence techniques in the placement of virus [5] lessens the importance of this approach.

The second approach is risk management. It is more and more widespread and proposed on the european level by insurance companies offering their services to hospitals. It is characterized by the computation of risks defining acceptable risks and those to be insured. Through several techniques which are themselves a computer system, the best placement for security investment are calculated through a level optimization [6]. This technique called MARION can be applied for network security [7] but is designed especially to meet the needs of the manager of an institution and not those of the one who will

ultimately be damaged: the patients are not relevant to the risk insurance of the hospital.. Such a method, especially because of its reassuring formalism and because of the possibility to compare the level of security can be used as a complementary approach to other strategies.

The third approach is moralistic. It consists of declaring a set of rules of conduct for the users of the system or for its potential enemies. Penal measures which should be dissuasive complete these rules. The appearance of these rules clearly indicates one thing: technological escalation is not appropriate to insure absolute data protection. The protection of data bank can be compared to the protection of a financial bank: if you have enough money, you can always rob a bank. The question is whether the price of the hold-up is higher than the return of investment (the robbed money). In this case, you are working with losses. In data protection, there is no absolute protection and this fact is actually reassuring.

The attack against Internet in November 1988 has made evident the transformation of computers as tools for communication as Winograd [8] explained some time ago. At the time of the attempt, we could read in the most renown computer science review a set of papers which appealed to the moral conscience of computer professionals [9, 10, 11]. This would have been unthinkable ten years ago. But the issue remains that we need to know what has to be protected and what does not. It is this question which is never discussed in the moral approach. The protection of data must be in certain cases the protection against data. If you put on the same level the confidentiality of data about the cancer of a patient and the data about the use of toothpaste, you encourage fraud.

6. DATA PROTECTION AND PRIVACY PROTECTION

The difference which exists in the data of a HIS and which makes it worthwhile to engage ourselves to protect is that it is about the protection of privacy.

Even in the most closely knit community there is a place for the individual private property [12]. This right has a long history which began long before data processing history. It is the right of medical confidentiality. A detailed history of medical confidentiality would show that, after it had been proclaimed by the Greeks, it was lost in the fog of Middle Ages and came back during the Age of enlightenment when it was declared absolute. Erosion by jurisprudence (obligation to declare contagious diseases, obligation to declare suspicious deaths, and so on) demonstrates that its development is very much linked to the history of relationship between the autonomy of the individual and the social compact. But among the people who attack medical confidentiality we find a large number of false friends of the patients and their two-faced principles; data are not covered by the same protection if you look at it from the point of view of the one who collects data and from the point of view of the one about whom data are collected. This is especially true when a medical doctor sells his clients and sells the same time their medical records.

Without going into the perversion of the State power which is used against the right of the person, we maintain that medical confidentiality, because its principle and its utility can be understood by everybody, is a good model for the criteria which should apply to data protection in the HIS, even if the potential attacks come from people who have not taken the Hippocratic oath.

The question of limited access to private data has been a point of discussion among computer people for a long time because through their work or passion they have increased ease of access to people's privacy. There was an astonishing response to this problem when the MIT hackers had to define their ethics in front of the institution [13].

The conflict between State power and the defense of privacy is more fundamental and we find this has been true since the beginning of data processing in the different attitudes of von Neumann and Turing, especially viz-a-viz their employer, the State. As long as World War II was on, they shared the same ethics and while Turing was assisting in the destruction of Nazi submarines, von Neumann was computing the optimal height of the bomb of Hiroshima. But after this time, the interests of von Neumann and that of the State were so mixed that he did not defend Oppenheimer. The interests of Turing were more and more divergent [14].

These reflections try not to fall into the moralistic trap which only pronounce rules but has forgotten their goals. In the end, what we need for private data is a kind of Red Cross, a flag that you can fly over certain information systems saying: here some individuals have deposited their personal belongings. It is their private domain, any one who enters or messes with the data will be denounced to the whole community so that s/he will never again have the possibility to put his or her fingers on a terminal.

7. CONCLUSION

The important thing is to know what you are protecting. If what you protect has meaning, you will find the motivation and ethical code to protect it. Because "the intrinsic value of a task does not guarantee that it makes sense and its humanization does not guarantee the humanization of its goals"[15].

Alan Turing, before he committed suicide by eating a cyanid apple like Snow White, saw all the ugly computer dwarfs and he chose his side. He was the first hacker since it was new to broke into the code of the Enigma machine. All his life he kept the secret he had. But he was the first to commit civil disobedience when the State power wanted to subvert his science. Why couldn't computer people, instead of a Hippocratic oath make a Turing oath.

July 26, 1989

Daniel de Roulet

WOMEN, COMPUTERS AND DEMOCRACY

**by the Women and Office Computerization Network
(Reseau Femmes-Information-Bureaux 7 Square A.
Cachot, 75103 Paris France)**

Unable to participate in person in the international ICATA conference, we hope this written contribution can serve as a useful input to the discussions and an expression of our support to the budding social conscience among young hackers, a milieu which has seemed so foreign and strange to us women.

We are part of a network that is not computerized. It is a human network concerned with the question of the impact of office computerization on women's work. Our collective means of communication is a monthly 4-page mini-bulletin, which we produce ourselves, whenever possible on a micro-computer, and send out via the national and international mail service. Other contacts are maintained by telephone, by mail and by personal get together.

We don't have the means at our disposal to use the computerized networks of banks, financial and insurance agencies, transnational enterprises of whatever national origin, or governments, although some of us, who work in universities or other research centres, do have professional access to data banks.

It should be stated that women's groups caught on fast to the use value of the micro-computer for their own activities. The same is true for computer-assisted publication - providing the necessary money was available. An example is the bulletin WOMEN IN ACTION, published by the international ISIS network, which has recently switched to CAP which they have learnt to do themselves. The last issue contains letters from women's groups from all over the world who express the desire to learn this new computer for their own use.

On the other hand, it would seem the womens' groups hardly ever resort to computerized networks, whatever be the reason. In France there is a public videotex network connected to the telephone. The terminals, known as Minitel because of their small size, are furnished free by the telephone authorities. Who ever one can so have access to various services proposed, payment for which depends on utilization time and not on distance. One such service, Alternatik, has been set up cooperatively by various groups in the "alternative" movement. In the beginning, we participated in efforts to include a heading "women" on the menu.

Information of interest to women can thus be inscribed on the Minitel's screen by anyone, anywhere, having access to a Minitel. However, despite the potential interactivity of this service, women do not participate at all. We should point out here that the cost of Minitel use is indeed rather high. Perhaps the lack of women's interest in this technology can also be traced to the fact the Minitel has been too much identified with the well-known "messageries roses". A word of explanation is in order here. By dialing 36.15

on a telephone, followed by the name of a "pink" message service, the user can participate in an interactive, pornographic conversation on the Minitel screen. These message services are supplied by private enterprises and a part of these calls, which reverts back to the telephone authorities, constitutes a major part of the government's income from Minitel. It is therefore understandable that some mothers of adolescents don't want to have a Minitel at home, whereas others object to the costly children's games available on the Minitel screen.

As a matter of fact, the national Teletel network functions on the basis of a tremendous deficit. This has just been pointed out by the Cour des comptes, the body which prepares critical reports each year on government expenditures. (see Le Monde of June 30, 1989). This huge waste is due to the voluntarist, politico- technocratic conceptions underlying the Minitel.

Nevertheless, we must recognize and stress how useful the Minitel was to the nurses' movement during their great strike in October- November of last year. Alternatik put its services at the disposal of the nurses' coordinating structure. Each section could then remain in constant contact with the others thanks to the message and interactivity capability of this tool.

This is one example of an alternative use of computer technology, and it is precisely this theme of the ICATA conference that has attracted us.

Our modest network rooted in France. We are far behind the English-speaking countries where women have been exploring problems of women's work and computerization for a long time already. We would like to point to the three international conferences on WOMEN, WORK AND COMPUTERS held in 1984, 1986 and 1988 under auspices of IFIP. The proceedings, published by North Holland-Elsevier, Amsterdam, contain a rich variety of factual material and depth of reflection. Numerous points of view are represented those that encourage women to seize the opportunity and become computer analysts, and others who denounce the "masculine culture" of that environment; those who point to the contradiction between the great hopes aroused by the computer and the real working conditions of women, and others who describe the conflict between users' needs - defended by the women workers - and the "objective" requirement of network profitability - defended by the administration.

Of special concern is the fact that the end users are not consulted or asked to participate in the design and realization of computer networks, installed in companies. Women would use such an approach almost instinctively if they were permitted access to these positions of responsibility.

Consulting agencies and courses on "modern management" do indeed favour such democratization for the introduction of new information technologies, but what takes place in real life is quite different. This is confirmed by the report "The company doctor faced with new technologies" which has just been published in the proceedings of the national conference on health at work held in Toulouse last year. It states.

"The automatisisation of various functions, which has been observed for a long time already in industry, is being developed today in the tertiary sector with unprecedented speed and scope, almost always without prior consultation of the public or those directly concerned."

Here is what the report says concerning computerized work.

"It is the posture imposed by a computerized job that is responsible for pains, stiffness, fatigue, and cramps of the neck, the back, the arm and the right hand. The following factors play a determining role in the appearance of these symptoms: age, the wearing of badly adjusted corrective glasses, the quality of the screen image, the physical characteristics of the work station, the nature of the task, its organisation, and especially the duration of uninterrupted work."

"Lastly, one can mention what we designate as computer-induced stress in view of the imposing number of operators subject to irritability, anxiety, depression and various psychosomatic troubles.

"Change in work content and experience, performance control by the computer, the monotony of data entry work, the waiting periods in interactive work, the lack of promotion, the decrease in interpersonal relations can be considered as conducive factors.

"The screen itself is definitely not pathogenic. Inadequate conditions of its use alone contribute to the manifestation of health problems".

And who are the people at the bottom of the ladder who are most often subjected to "inadequate" working conditions? The report avoids any identification by sex, but we, who have read studies made in various countries, we know that they are almost exclusively women. What the company doctors say is therefore nothing new for us. But how many of those present at the ICATA conference were aware of these facts.

If practically no women are to be found in the hacker environment, this does not mean that women are not interested in the computer tool they work with. On the contrary, research after research has shown that they want to know more about it, that they would like to use more of its functions. Their training, however, - if they do get some - is almost always limited to the bare essentials necessary for their job. For reasons we cannot go into here, these jobs are at the bottom of the ladder for the great majority of women. From that vantage ground, hopes quite naturally arise for alternative usage of computers.

Let's have a look at the kind of computerization women have access to, today, in offices. Word processing is no longer the prerogative of a specialized, "dedicated" machine - to use today's jargon - although that machine, and its dedicated women, are still a long way off from the ash cans of history. Word processing has become software for the micro-computer, it has rid itself of its sexist odor, and today men, too, are discovering all its wonders.

A recent issue of the magazine TRAVAIL et EMPLOI features an article entitled "who uses word processing?" It's based on a quite serious research report. It states that 21% of all executives ("cadres") use wordprocessing! They represent one quarter of all the 1.600.000 people in France who do wordprocessing! However, beware! For 9 out of 10 of these executives "use

word processing in their professional activities together with other kinds of information processing", whereas one third of typists and secretaries "use only word processing" in their work. And the article adds: "Almost all of the 300.000 persons who use word processing only have at their disposal only the simple machine." Since the article is silent on the subject, we shall not disclose to you the sex of these users whose labour force is allowed to produce one product only.

Let us note, in passing, the use of the words "simple machine". The word processing machine is not at all simple, for it is a true micro-computer, although specialized, and a number of months on- the-job training are necessary, after a few days of initiation, in order to really master it. All the women who use them will tell you so. But this objective requirement of skill is not recognized. It remains as invisible as their domestic labour which is also characterized, by others, as "simple".

As for 'alienation' with regard to the product of one's work, the text to be processed, we are told, has been conceived by 3/4 of the executives themselves and only by 1/3 of the employees. There is also a notable difference in the number of hours spent in front of the screen on word processing. Are you surprized to learn that "for every 100 hours of use, 60 can be attributed to employees and only 13 to executives, although they constitute, respectively, 42% and 24% of the users."

Fifty percent of word processing users are women, states the article in this only statistical breakdown by sex. This is due "solely to their predominant presence in employee functions related to such work", because "they are indeed relatively less numerous than men among executive users."

Yesterday, when "information technology" consisted only of the huge centralized computer, the sexual division of labour was more clear-cut and more easily recognizable. By and large, those who directly serviced the monster were men. The punch-card operators were all women. Despite the technical changes that have taken place since then, this structure of a sexual division of labour continues even today, like a religious community that has tranquilly gone through the upheavals of centuries of time. Indeed, whenever it is a question of mass data input on a terminal, such data being destined for treatment by the central computer, we find that it is women who do this work - in major administrations and private enterprise.

They do this work and suffer the health consequences we mentioned above. What needs to be done to improve their working conditions is well known, but the money does not seem to be available... Computerization's immense productivity gains are not only used to quickly pay off investment costs but also to substantially reduce the work force. We have just witnessed this in France, for example, in the Finance Ministry, where the elimination of a great number of jobs "was justified by the progressive computerization of the tax administration sector". (Le Monde, 25-26 June 1989).

Should we as women rejoice because executives - mostly men - are now also doing word processing? It all depends. In France, certain "progressive" administrations permitted free experimentation by the personnel in the use of the new micro-computers. What resulted was a give-and-take.

When executives and technicians began to carry out themselves the word processing work formerly done by secretaries, the women insisted on doing some of their work on the micro-computers. Unfortunately, work is not yet considered as a continuing autonomous process of social experimentation. It was not long before new, rigid job definitions began to be elaborated. But the possibility of alternative usage of office computerization had been glimpsed. By breaking down hierarchies, the new technology could further democracy at work...

Is this too rosy a perspective? It would seem so, on reading Nicole Mandon's study on office computerization in the European Community.

Based essentially on surveys made in France, she came to the conclusion that new possibilities of "careers" are being opened to women in connection with word processors - "monitrices, animatrices, coordinatrices de bureautique". As you see by the feminine ending of these words, these positions are intended to be female jobs, a new segregation in a newly created hierarchy where a handful of the "happy few" can rise above their colleagues by "helping and encouraging" them, by controlling their work and depriving them of initiative. As for the mass of women, she found that typing pools were not being disbanded but instead turned into high-pressure word processing production centres. Whatever non-typing computerized functions these women had been able to assume in recent years, here and here, the maintenance of lists, for example - were now being performed by the executives themselves on their own micro-computers. Many other tasks formerly considered secretarial duties have met the same fate. The number of secretaries has dropped drastically, and those remaining now work for several executives at a time.

Although appropriated by those in power for their own interests, computers and their metamorphoses are products of society as a whole, of its educational institutions, its accumulated wealth. The computer's miraculous productivity is experienced by working women as a great "time saver".

What better alternative use for computers than to appropriate this use value for ourselves so that the "time saved" may serve the time-consuming process of democracy at work?

**Lecture on TERMINAL,
a French magazine reflecting on information technology
(presentation of the "hacker press", Thursday, 3 August, 1989,
16.00)**

Seven years ago the TERMINAL magazine was founded by the CENTRE D'INFORMATION ET D'INITIATIVE SUR L'INFORMATISATION. Since 1979 this association has been a gathering point for political and union militants, whether or not working with information technology, who wanted to expose the risks of the computerization of society, concerning personal freedom, working conditions and problems of employment as well as information exchange and communication.

And so this two-monthly magazine is not really a Hacker organ. We don't break into the computer system of the French army or the Ministry of Finance. We are *explorers*, satisfying ourselves by publicly posing questions evoked by the computerization of society. Of course we do talk about Hackers: our before last issue for instance, treated virusses. The professional journals in France had been writing hysterically about them: comparing virusses to AIDS, and demanding the isolation of certain files, just like some French fascists want to isolate sero-positive people. The journalists followed a preventive strategy, taking the man-machine metaphor to the fringe. We denounced this campaign, explaining that virusses and hacking contribute to making the public aware of totalitarian and mercantile motives of computer manufacturers.

According to us it is most important to give room to debates, and to bring computer users into contact with specialists, to look a bit further than the screen! That's why the TERMINAL authors are not only information theorists, but also sociologists, philosophers and reporters. In the past decade, our thinking about information technology and theory has developed. In the beginning of TERMINAL we were only interested in the dangers of large-scale personal registration of whole populations and the ever growing division of labour. Even though those dangers still exist, we now also focus on alternative use of computer technology and on the new ethics.

Information technology invites us to explore many domains: defense, relations with nations exploited by the North and by Big Science, ecology (whether scientific, humanitarian, social or mental), evolution of the production process, systems of thought and communication, etc... to cite only the most important subjects. As science and technology spring from the human brain, they cannot be neutral and autonomous. They are cultural products, whatever those who expect a lot of computer programmes may say. This is what we stated last July in a debate we organized during the counter-summit of the seven poorest nations (TOES) when our president (Mitterand) celebrated the Bicentenaire (bi-centenary of the French Revolution, red.) with the seven richest nations.

We don't believe in the "progress of science", this formula so often used to hide the abuse of power and the catastrophic orientation of certain scientific research. The same thing goes for information theory! We write, organize

debates, stay alert, to *control* science in every possible way. It is a process that results from people working together: non-stop it is busy connecting and disentangling new associations.

We have come here as a character in an interface. Up until now this has not worked out very much, notably so in the field of telecommunications because our MINITEL system is so very French, so very specific... But you never know, because an interface is a translator, a representative, a spokesman. An interface is a door, a canal, a carrier, a border, a separator, a hyphen, anything in between. In other words: any operator in any flux, any intermediate, any medium is an interface.

The alternative information network ALTERNATIK, that has been operating for one year now, has adopted the TERMINAL strategy. The one does not exclude the other, because cognitive processes often result from heterogeneous collectives, in size, in provenance and in speed.

And also the authors of TERMINAL are not exactly the same people as ten years ago. Many have abandoned their 1960s affinity with radicalism, with revolution. But all still fight against the westernization and pillage of the world, the wrapping of the planet with endless lengths of cable, police control over Europe (the Schengen-meeting last June made a good start designing such a continent) [see also the piece on/by Peter Klerks, red.], and of course racism. These convictions must become signs in the machines, small or large, high speed or not, with the best connections or not. A new citizenship that breaks into the codes of virtual capitalism, the super-powers' defense secrets and their strategies of waste, that proposes other ways of life, putting a stop to certain modes of scientific research in favour of others - that is our endeavour. We hope it interfaces with that of other magazines, other movements in Europe or any other part of the world, that is what we hope for, and that is why we have come here.

**PART IV
ICATA DECLARATION AND OTHER STATEMENTS**

**ICATA FINAL DECLARATION
(AS ADOPTED ON FRIDAY AUGUST 1989, 16.30
AT THE END OF
THE GALACTIC HACKER PARTY & ICATA '89
PARADISO, AMSTERDAM, HOLLAND)**

We, planetary citizens and participants in person or in electronic spirit to the fora and activities of the GALACTIC HACKER PARTY and ICATA'89 in Amsterdam, having confronted during three days our ideas, experiences, hopes and aims for the future, and deeply disturbed by the prospects of an information technology let loose by economic and political actors without democratic control and effective popular participation, **HAVE RESOLVED THAT.**

1

The free and unfettered flow of information is an essential part of our fundamental liberties and shall be upheld in all circumstances.

Information technology shall be open to all, no political, economic, or technical consideration shall be allowed to impede this right.

2

Government shall be fully accessible to all people at all time. Information technology shall enhance the scope of this right, and not reduce it.

3

Information belongs to everybody and is made by everybody.

Computer scientists and developers are in the service of everybody and shall not be allowed to remain a caste of privileged and unaccountable technocrats.

4

The right to information goes together with the right to choose the carrier of that information. No model or format of information shall be imposed upon any individual, community or nation. Especially, the pressure to adopt inappropriate "advanced" technology shall be resisted. Instead, user-friendly, low-cost & low-demand methods and equipments shall be developed.

5

The protection of individual liberties being our paramount concern, we demand that no private information shall be stored and retrieved by electronic means without explicit approval of the concerned person.

AVAIL PUBLIC DATA FREELY, PROTECT PRIVATE DATA FIRMLY
is our motto.

Standards to this effect should be developed in cooperation of concerned parties.

6

Once non-consensual information is banned from the realm of informatics, all data therein and all networks shall be freely accessible. Repression and prosecution of hacking shall become senseless, just as Secret Services themselves are already.

Meanwhile, we demand that all legislation, whether already in force or under preparation directed against hacking by individuals without criminal commercial purpose to be withdrawn forthwith.

7

Computer technology shall not be used by governments and corporate bodies to control and oppress everybody, but shall on the contrary be used as an instrument of emancipation, advancement, learning and leisure. Likewise, computer technology, and science in general, shall be removed from the hands of the military establishments.

7 a

The right of unrestricted and private links with all international data-communication networks and services without any intervention or monitoring should be acknowledged.

There should be maximum charges set per country to access these public and private data-communication carriers.

Countries without good telecommunication infrastructure should be enabled to participate in the world-wide communication structure.

We call on progressive users of information technology world-wide to share their knowledge and skills in using information technology with grassroots organisations, to enable international and interdisciplinary exchange of ideas and information via international networks.

8

We do not want an information society, but an informed society

9.

All information is also deformation. The right to information is inseparably connected to the right to deformation which belongs to everybody. The more information is produced, the more information-intrinsic chaos is created and the more noise comes into existence. Destruction of information is, just as production of information, the inalienable right of everybody.

10

All regular and conventional information channels shall be subverted by means of the meta-realistic twist and shift of the factual reality in order to produce chaos, waste and noise which in their turn are deemed to be carriers of information.

11

The freedom of the press applies unabridged to such techno- anarchistic publications as appear from time to time to liberate the people from the tyranny of man and machine and system.

Contributions to the first draft (from Workshops and Debates during the ICATA'89 conference In Paradiso)

(1a) We demand that the life-span of computers should be extended through upgrading. For example, companies should guarantee their computers for 10 years.

(1b) We demand laws classifying discarded computers as toxic waste.

(2a) There are practically no women to be found in the hacker environment.

Women have limited access to computarization. It is the old phenomenon, the sexual division of labour puts women at work with word-processors.

(2b) New computer technology should be used to democratize work conditions.

(3a) The difficulties encountered when trying to exchange data between two points in the universe is reciprocal proportional to the distance between those two points. Video linking with Moscow is considerably easier than exchanging files from our edit-room to a central UNIX system in the next room.

(3b) The optimum number of hackers on certain system is a curve: either too little or too many hackers make a system insecure. Scientific studies have proven the latter situation is more fun.

(3c) No matter how they oppose of us, phone companies always turn out to be the biggest sponsors of hacker meetings. Desperately struggling to keep the general public uninformed, they unwillingly provided the infrastructure needed to break them.

(3d) Murphy's law (if anything can go wrong, it inevitably will!), was probably first put into words by hackers. Do not count on gratitude from him when trying to organize a hacker event.....

(4.) Hacking is curiosity and can turn into fascination. Once fascinated, the difference between being fascinated by the structure of the Secret Service and being fascinated by a computer system, can disappear. But Power-play is no children's game. Hackers should realise, that every person is responsible for the effects of his deeds. Hackers are no exception to this rule. They should realise that they can only trust themselves. Even if you do get involved with bigger systems, even Secret Services, it is the person, the hacker's own responsibility (Neurenberg 1945).

(5.) The real threat to an individual's way of life are those people and organisations, that specialize in linking different data systems together.

The more people that work in one and the same computer system, the less secure it gets and the less private these data will be. Technical barriers cannot solve the technical problems that come from people being human.

(6.) Technology should be used but not trusted to the extent of subverting our actions and expectations to it. The computer is the embodiment of the paradox of accelerating time: even the lightning speed of modern telecommunication can and will not erase time and distance, nor will the most advanced apparatus stop the hand of fate. This is an old wisdom, that probably needs to be realized again with every technical "revolution".

(7.) INFORMATION = DEFORMATION All information channels deform the content of the data conveyed. No matter what kind of data or what kind of channel you take into account, it will not be able to transport a complete perception. Confusion is the usual result (Confusion is not a negative state of mind).

Data doesn't need to be clear/concise/readable to create some kind of impact.

**Statement for the ICATA'89.from
THE AFRICAN COUNCIL ON COMMUNICATION EDUCATION
(UNIVERSITY OF NAIROBI (KENYA))
(By Boafo, Hamelink & students.)**

1.

The current discussions on alternative uses of computer technology are guided by the same misleading assumptions that dominated the modernisation theories of the 1950s - particularly the notion of information technology as an independent variable.

However, computer technology is a dependent variable - its effectiveness will be largely determined by the existing social conditions. As a result: more computers means more global inequality.

2

The nature of computerization presupposes the displacement of jobs: computers are meant to reduce, not to increase labour.

In the countries that need to create vast volumes of employment in the years ahead (as in Africa) the introduction of computers - in combination with current laissez-faire policies and in the absence of adequate legislation - will only exacerbate the problems of development.

3

If you give developing countries computers, you need to give them the technology to go with if the benefits are to outweigh such problems as dependency.

4

We need computer technology to service the bias of our economic structures which, in most developing countries, agriculture.

5.

We need computer technology to help to create the conditions for industrialization. This is a more realistic proposition than the popular notion that it can help developing countries leap-frog to the stage where they find themselves at par with the developed world. Technology leap-frogging has never worked for Africa. On the contrary, industrialization seems to be a necessary stage of development that must be taken into account even by such new communication technologies such as computers.

Statement from the Chaos Computer Club.

On privacy and the free flow of information in society

Hackers are, although most of them are not aware of this, a strong and important part of today's civil rights movement. In contrast to official authorities and industrial institutions that promote the "information society", hackers declare and develop the "informed society" - a community of living beings where everybody has the same access to public data - be it about society in general, government, the military-industrial complex, etc. So nobody can have an advantage just because s/he has more or better information than other people. In an informed society, the implicit right of everyone to free, unlimited and uncensored access to data is guaranteed; on the other hand everybody has the right to protect his/her own private data. So one of our slogans is "Use public data, protect private data".

Communication is the basis of a community. The common root of the words "community" and "communication" expresses that a community can be defined as a group of people that (can) communicate with each other. Therefore a community can handle problems effectively only if its members communicate freely as this strengthens the group, spreads proposals, ideas and solutions or can even help to locate and identify problems.

Most problems today are of a global nature. Environmental protection, the peace movement, women liberation - all these are problems that can only be solved by a global community having access to global communication, free, unlimited and uncensored. So the New-Age slogan "Think globally, act locally" should be translated as "Act globally, dial locally" as computers and computer networks are an ideal tool for this - provided they are used the right way. Computers are currently the most effective tool to access masses of data - but then the data stored in databases must be made accessible.

Computers can also help you to protect your privacy. For the first time in history we have the possibility to protect data (apart from memory) in such a way that no other persons can access them if we do not want them to. If the computer which can be a tool to access data utilizes (good) encryption programs, everybody becomes able to expand his private domain to include his/her computer files containing private data.

All what is said before raises (at least) one difficult question: "Where lies the demarcation line between public and private data?" This is an important issue to be discussed - and not only by hackers. We believe that no omnibus answer can be given to this question. It is a trade-off between public and private interests. We could try to explain this difference by taking two cases in point: If an industrial company pollutes the air and the water with chemicals, do they (as an juristic person) have the right to protect this data (what chemicals and how much)? We believe that such data ought to be made public because the pollution of our environment concerns us all - and we are the public. But on the other hand, if a person is infected by the AIDS virus his/her interest in keeping this information private should prevail above the so-called public interest because within our society as it now stands, AIDS-infected persons are discriminated.

Statements by Peter Klerks

1.

As an outcome of the technological infrastructure and of the business oriented structure of databanks, these have become commercial and often monopolistic in character. Access to information is made difficult for ordinary citizens. Because of the knowledge required, and high costs of access, information is made artificially scarce and has thus become a political commodity and a commercial good.

2.

Everybody should have access to information. Information is essential. But then, don't we make a myth of information? We should think more about which information is worthwhile to obtain. Good & useful information will always remain an elusive thing.

3.

Unlike the situation with other issues (environment, poverty, etc.) information technology is not a problem in itself. And it is also a phenomenon that has joyous and liberating aspects.

Statement

by Volker Grassmuck

(also as reply to Lee Felsenstein's "Techno(logist)s should rule the world")

"Das Wesen der Technik ist selbst nichts Technisches" (Heidegger)
(approx:There is nothing inherently technical about technique)

People who design cars know everything about them. But cars in themselves have nothing to do with technique. The point of a car is to circulate. Putting technocrats in power means getting a perfect system from a purely technical point.of view. But how can an engineer be expected to know anything about communication? They can build radio-transmitters,yes, but what they are talking about on the air might just be about radio-transmitters and nothing else. Look at the questions the Russians asked on the conference today (the Russian enquiries baffled the assembled hackers in Paradiso because of their highly technical nature; at the same time the Russians were unable - or unwilling - to answer "political" questions, red.). So what do you win by substituting an economic elite for a technocratic one? You don't get rid of the elite idea that way. Maybe the philosophers who are not interested in any form of worldly power are our only chance after all.

Messages

Message no.: 8 Message from: AMRC Subject: STIRRINGS FROM THE EAST Sent on: 02-08-89, 08:12:52 Receivers: INTERDOC-DEMO ICATA89

Greetings to your gathering from Hong Kong. The pirates of the Far East have a long and celebrated history of ignoring trademarks on hardware, breaking through the copyright protection on software, and copying both! Intellectual property is spiritual poverty.

We have always noticed with amusement the hang-ups, holdups and other ideological problems that some progressives in the West have with using computer technology. They grumble about value-laden technology, cultural standardization, control, exploitation etc. They even dare to project their own fears and inadequacies about computers onto people in the third world. They talk of it being "inappropriate" for us.

May we suggest an unproven hypothesis: Computer technology is so complex, and so different from everyday social relations, that it projects a form of cultural imperialism even onto those societies where it was developed. For the first time, the Germans, the English, the Dutch are experiencing the imposition of alien values and standards on their lives and their work, and they do not like it. We in the Far East have become accustomed to the assault of alien cultures, values and systems. Computer technology is just part of a tide of foreign values which began with religions and continued with science, technology, art and education through to crap TV, fast food franchises and weapons fairs. Progressives in Asia have learned to take what may be useful to us, and turn these tools to our own use. This is why we are amused by those in the West who are outraged by new technology -- you are experiencing your own cultural imperialism. Welcome to the club.

Good wishes, Jack Flash. (I'm not a Professor or a Dr.)

Message no.: 12 Message from: SATIS.OSBORN Subject: ELECTRONIC UNITY IS A FRAUD - DISCUSS Sent on: 02-08-89, 22:29:01 Receivers: ICATA89

While Jack Flash has done a useful job in pulling down the morally bankrupt ideological trousers of the north (ArroPance??), the comments from Kenya and the ICATA89 Statement both leave me cold. Development will not come from traditionalist minds and hands like those. (Development, for

this letter, meaning an equitable distribution of use and control of world resources amongst all the world's beings - and our grandchilds, ok?).

I am disturbed by the Nairobi claim that more computers means more inequality, unless the authors always see computers as tools for oppression. Which they don't since one hundred long words later they assume computers have a role to play in production processes, both agricultural and industrial. Right. If such media specialists as the Nairobi authors are as confused as that, good luck to ICATA and similar innovations, for showing that the media and communications are too important to be left to the specialists. I am equally disturbed by the defensive, conservative tone of Jack Flash (we've been screwed for centuries and now the Euros are squeaking for having the same happen to them). Nice one Jack, what now.

One way forward, maybe, is to leave behind pointless accusations about cultural imperialism and develop on what ICATA and Nairobi have said about The Computer not being neutral. No it isn't, nor is the fuel efficient stove, nor water barrels nor other barrels, nor poetry nor child-rearing. It's only a damn tool, the simple creation of human ingenuity, and it's there to be used by people who do - or do not - know what they want and how they are going to achieve that.

There's a limit though. To expect any visionary unity from ICATA is the same as expecting a consensus on environmental affairs from bicycle users, windmill engineers or packaging companies.

But for what the Satis organisation wants (which IS development, decentralised) we find that computer linkages, such as those facilitated by Geonet are the most appropriate technology.

Written in the full knowledge, but not expectation, that every word of this can be read by Hackers anywhere including Amsterdam, and Springfield, Fulham, Tripoli, etc and not giving a damn, Enjoy yourself, we'll all be tuned in every evening at eight. -- Abrazos, Paul

Message no.: 14 Message from: AMRC Subject: MORE FLASHES FROM THE FRAGRANT HARBOUR Sent on: 03-08-89, 09:49:02 Receivers: ICATA89

Paul Osbourne is a bit serious isn't he? I thought this was meant to be a party. I don't usually spend parties in the

kitchen with the avocado dip and the intellectuals; I'm the type who likes to overdo it on the dance floor -- putting on the heavy metal.

More than conservative, I'm a counter-revolutionary. Since June 4th there are a lot of us around here. And we have a secret lust for cultural imperialism.

You summarized me. That's the trouble with the written word. You wanted a formula: What now? I remain amused by Europeans: an occasional fleeting rise of the corners of the mouth. That isn't exactly a declaration of defeat is it. I thought contradictions were there to be heightened, particularly amusing are the capitalist ones. Wind yourself up then.

Getting battered about by alien ideas changes people in the end, it can motivate people. We in Asia are often changing. Sometimes the reaction to the PERCEIVED cultural imperialism can be enormous. Ask Salman. If peaceful change takes a while, we'd just as well be amused along the way.

Therein lies a power for change.

It's people, you see, where my hope for change lies. People are power, not information, and not computers. People are only powerful when they are united. To unite they need to communicate. Talking is best, you can see the corners of each other's mouths.

As for computers in our hands, I'm not sure if they become Pancho Villa's train, knotted string, worker's printing presses or disposable chopsticks (and you can do so much with chopsticks). I could have written this with a burnt chopstick.

Message no.: 5577 Message from: Roelof Langman Subject: LET TO LEE COMMENT Receivers: ICATA89

One of the ideas that circulate here (not very widely, but all the same) is that technology should be an instrument you can use without any influence on the purposes it is used for. "If I want to ring someone up, phone someone, I am not interested in the technology of the telephone net, just in the message", some guy said in the discussion on Computer Ethics yesterday. And now, even Heidegger is summoned up to bolster this technology-Feindlichkeit.

What happened when the telephone was invented? One example: psychoanalysis was invented. It's invention depended on the invention of the telephone: telephone was the instrument that suggested the possibility of a complete transparency in human communication, a listening that left the speaker in

his or her value. The new technology, in short, changed the possibilities of human communication and with that, of human life. Of course, Heidegger didn't like that. He wanted to recreate agricultural social relations in an industrial society. He wanted to use technology for old purposes, and therefore didn't want to hear about its possibilities for transforming human social relations. That is the motive behind his being an enemy of socialism and a proponent of natio[nalism &]nazism.

The problem seems to me to lie elsewhere. A fascination of the form of the new technology instead of its content can lead to the use of technology for old purposes: for capitalism on the one hand, and on the other hand - what do we communicate about on the network, when we get the chance? Power, Money and SEX, [s]ex, mostly. Why not go [out &] (not) explore more bravely?

Message no.: 1382 Message from: "C U _.._ _" Sent on: 02-08-89, 04:12:06 Receivers: ICATA89

Knock Knock sends his greetings to aa...(shit !) all participants of the GHP

Some general info on ahacking: try the dutch datanet 1 access:

dial modem 0104134700 login with usernumber 103315 passwd: 7muddsk2

now your in to the dutch network. DO NOT STAY ON THIS SYSTEM LONG!!!!

Rumour has it that the lines are being traced. So be carefull, don't make an ass of yourself.

Try calling one of the following numbers:

0208057040540 0262458900400004 ooops, that should be:026245890040004

or: 05252116101 and login with username pad passwd packet.....

right, now, to obtain a list of NUA's, call 0234223519191 type help, ctrl-J and wait. Then choose option address. you will now see a list of NUA'sd floating by

C U _.._ _

Message no.: 7109 Message from: Michel Bel Sent on: 02-08-89 Receivers: ICATA89

I heard a few days ago the following statement made by an old farmer: when a farmer starts using a tractor, his soul changes!

How much have our souls changed since we use computers? Has anybody gone into selfreflection about this topic? I, for myself think, that my ways of thinking have gone both into more, and less mechanistic ways of thinking.

- More: how do I tell it to my computer to solve the problem?

- Less: if I can tell my computer this problem, I (may) have more time for thinking out other weird ideas.

Do computers save my time really? Is there such a thing as time to save?

Computers have done one thing only for me which cause real fun: showing the mathematical 2-, 3-, 4- dimensional function I hardly can imagine and that in a dynamic way. In a sense, I have become a more visual mathematician.

Now, what is the price I paid?. Have I sold my soul now to computing, or have I just been sold on computing?. I think I have been extended in a way I really would [not like to] miss.

Comments, please. what is the change in your soul? or to your soul (mind..)?

Message no.: 7109 Message from: Deep Thought Sent on: 02-08-89 Subject: Deep Thought Receivers: ICATA89

Let me say these days were a nice thing and I enjoyed them really.

Some comments on the future development of the hacker szene:
- Keep hackers hacking! This is the best protection against total control of authorities.

- Create own networking. This will make you independent of most controls that might be impressed by any authority.

- Help the people to use these networks. Only if people are able to use those networks free information can be created, spreaded and retrieved.

- Again: keep hackers hacking!. Hackers are the specialists that CAN PROVIDE the means of communication but they should of course never loose direct contac with people who want to use the networks. THIS CONFERENCE SERVED THIS PURPOSE!

So let's do it again!

Message no.: xxxx Message from: The Sourcerer Sent on: 02-08-89 16:48 Receivers: ICATA89

These three days have been very interesting, mainly because of the facalities offered by HackTic/Paradiso. The real discussions about free flow of information and protection of

private -personal- data was not reached. I for one hope that the way this conference/party was organized, will contribute to a spread of the information-technology and society discussion to all freaks present, liver {=wether?} locally or globally.

We -hackers & freaks- do have to be aware of the fact that the technology we are using is completely objective. .What is done with it, is in the open. We do have to accept that the consequences, following from that fact. .Use computersa[...], but use th[] do not [...]

{followed by 5 unreadable lines}

.
. .
. .
. .
. .

type [...]

{1 unreadable line}

Message no.: 7109 Message from: The Sourcerer Sent on: 02-08-89 16:48 Subject: Reaction on GHP, ICATA'89 Receivers: ICATA89

All you freaks do decide what you want with your technological knowledge and think -and think again- about their social consequences. Be aware of the fact that technology is an objective science - no mean ethical meaning is given before it is used. That is: you decide this meaning yourself!

Keep on the good work - love to all
the Sourcerer

↵

THE COMMUNICATION CATASTROPHE
A meta-realistic manifesto
Towards a dialectic of disproportion
(A pastoral prayer in the machine-park by AILS)
Arranged by the Academy of Ambulant Sciences.

"All is written down in the Book of Time."

The directory showed us in the Meta-reality file the following: "Thus Moses descended from Mt Sinai bearing the text-carriers where the people of Canaan read the following: 'All will be eliminated from the book of Space.'

The virus craze which is logged into the pc-proletariat has been induced by the fact that it is not so much the free flow of information among the citizens that is a menace to the almighty of the world-government as its absence. Temporarily, the virus creates by way of delete and overload a liberated territory which can be occupied by data-communication. The technonihilists follow the words of the anarchist Bakunin: 'The desire of destruction is a creative quality!' The reflection of the mind in information has never been subversive in itself. Information is a virus that multiplies itself indefinitely. To contain hacked data more information is needed, which ask for more data, etc. The ecstatic virus pushes this cancer of information till the end by mortifying through a complete overload. The hungry virus, on the other hand, sucks information away and heads for a total delete. It creates a void by incinerating the data. It knows that the computerization of consciousness is directed to pacification. Every nomadic thought has to justify itself in the fullness of political codification. Its lack of consciousness was its greatest offence: marginal, immoral, unrealistic, irrational, lunatic. The virus has abandoned common sense and deserted to the paranoid parameter, the heir of anti-production, the absolute data-free communication. The virus is a computer's prayer.

The exclusivist hacker ethic tries to reanimate the bygone discourse of political reason by introducing 'everyday life' as metaphor for cyberspace. One notices the language of traffic regulation, sensible behaviour in jams, give way to other road users, etc... The many informal encounters of network users get a sexual overtone as these are enjoined to restrict themselves to safe-hacks. But the data-world has nothing in common with what until recently was forced upon us as the actual reality. Nothing exists in its own right, there are only semantic systems and compulsory codes to read them (also called 'common sense'). Who masters the code can direct the world, control and exploit it. But in the world system too, ethics have been eliminated ever since the catastrophe of chain reactions dissolved the historic order.

Pollution, for example, cannot be solved by a change of consciousness because it has left the human scale behind. The virtual world of the cyberspace seems to stay in this domain. Hard- and software are designed by patent-prone professionals and retracable till every single bit. This is why ethic hackers still want to call upon the possibility of a reasonable use of the keyboard. The virus is already a step ahead. It has left the human all too human sphere and bets on the unimaginable which lies beyond the world of ideas. It seeks contact with the aliens in the network, the warriors from the other side, the pink panthers which broke out of the bestiarium of the cyberzoologists. It feels at home in the biological complexity of the infinite relations, mutations and cross-overs. It has got no aims but only wakes up to the chain-reactionary liberation of the amazing. Although the virus appears to be a virus for the present order, it is the herald of a metarealistic reign.

During the introduction of the computer media, the hackers movement attached a democratic ideology to the military vehicle. The overflow of the military into the civil space by means of the massive armament of the population with the PC could be implemented under historical signs of liberty, equality and fraternity. After the realization of a complete adoption of electronic homework the traditional military machinery can now be torn down. We are entering the era of the disarmament race between Gorbachov and NATO. The aim is no longer the hostage taking of the world population but the indoctrination of a universal consciousness upon the legions of completely isolated PC-civilians. What could be discussed about during the Cold War has become undisputed truth: we are all on the same disc and we can be deleted in a second. During this second phase the professional hacker-community is disturbed by the appearance of cyberpunks, software traitors and frustrated subordinate hacking misfits. Their slogan is "one network or no network". Security doesn't exist and hackers will have to secure their own morality with an 'informational responsibility', a device which is ineffective by definition, and they know that too.

Ahead of us does not lie the prospect of data-travelling on secured roads, but the dissolution of cyberspace. There may reign the complete sensory clash of the hacktic-riot or the spiraling grace of the New Age. There is nothing new under the sun. But the virus already signals that it is ready to invade all zones where the code gets into disarray. The stranger is not among us yet, but he's ready. He knows. He waits. He waits for us. It is up to the cyberpunks to form an alliance. The future enters from the outside.

Foundation for the Advancement of Illegal Science (AILS), in formation

DFM / ARTburo HÆVFTIES

Welcome...

In Gotham once the Harmless Bird lay TWO,
This made them grow immensely rich Gave them grow immensely rich
Gave the Story goes A Set of Wise-acres arose Skill'd in the Store
Would Methods vague and wide Which not a little swell'd their Story
goes A Set of Wise-acres arose Skill'd their District
was both far and wide Which not an Egg was found,
But above all that they put a Chain, And do That had no Effect at all,
And do That had her struggle, flutter, squall, And do what every Goose,
by all that they possess'd Was a fine Goose would pound a Magpie,
drown an Egg of Gold This glorious purpose to obtain About her neck
they put a Chain, And do That had no Effect at all,
And more them grow immensely rich Gave them grow immensely rich
Gave the Would do what every Goose would do That had her Throat,
The case belongs to behold Who laid each day an Egg of Gold
This glorious purpose to obtain About her Wings of worthy Note,
Cry'd Damn her neck they put a Chain, And more They did, ~
but not a little swell'd in the Store Would Methods vague and wide
Which not an Egg of Gold This made them an avaritious itch,
They did, but not an Egg of Gold This glorious itch,
They not a little swell'd in the great Politic Wheel Could pound a Magpie,
drown an Egg of Gold This made her Throat,
They not an Egg was both far and wide
Which not a little swell'd their Folly to compleat,
They not a little swell'd their Story goes A Set of Wise-acres arose
Skill'd in the great Politic Wheel Could pound a Magpie,
drown an Eel With many more them grow immensely rich Gave the Story goes
A Set of Wise-acres arose Skill'd their Store Wound.
In Gotham once them grow immensely rich Gave them grow immensely rich
Gave them grow immensely rich Gave the Store Would Methods vague and wide
Which not contended with their Folly t

HERE SPEKS YOUR STEWARD

THANK FOR THE ATTENTIONS

ENJOY YOUR LIFE
LIVE AS YOU MAY
DIE WITH DIGNITY

TEA WILL BE SERVED SHORTLY.

```
o.box10096==+1001      EB.Amsterdam==+ARTBuro+31.20.204963==+Host
online sometimes+==+User may Password: Horseless Carriages May
Return to dust==+Accepted==+User offline 05/10/88
04:01:05PM==+==+User BEITOFGHXFGHJ online 05/10/88
04:01:11PM==+Password: HJKHKG==+Password: BERTJFGHJ==+Password:
S==+Access Denied Naturally+==+chris online 01/01/80
03:17:21AM==+Password: NOETHER==+Password: NOETHER==+Password:
NOETHER==+Access Denied==+
```

letch)

::: SNOWY (ttyq3) [Login]

> SNOWY (ttyq7): rmail

è > \ (ttyp2): noone can type now.....

> root (ttyq6): ;heeft iemand erik smit of robert cop al

::: KGB (ttyq6) [Logout]

> dr.boo (ttyp5) [Logout]

> daniel (ttyq6) [Login]

::: god (ttypd): SYS: Signon AMSTD

::: dries (ttyq1): Hey, root, this line seems to work.

> dr.boo (ttyp2): pinox: *****

> snowy (ttyq7): amnis medical database: 0209909151 nr100

> Pinox (ttyp5) [Login]

> dr.boo (ttypa) [Login]

::: ralf (ttyp3): whats 051 Dr.boo (ttyq2): Has anyone ever got a

> Pinox (ttyq7): nee

> Cletch (ttyp6): ?

> HAMBURG (ttyp3): Hey root (ttyp2): just testing.....

> daniel (ttyq5) [Logout]

::: Cletch (ttyp3): Hello too

> Pinox (ttyq7) [Login]

::: Pinox!

> \ (ttyq1): Yep. they jackass next to me

> Cletch

::: Cletch, how was the modem??

> Cletch (ttyp3): Hi Pinox (ttyq2): from ?Cletch (ttyq3)

> \ (ttyp3): Hello too

> HAMBURG (ttypd): SYS: Signon mari

```

> Cletch (ttyp3): whats 051 Dr.boo (ttyp6): l
> Dirty Harry (ttyp3): ss
> snowy (ttyp3): whats not funny !
::: hnjoname (ttyp5) [Logout]
> PVC (ttyq3): hey whe have an outside line seems to work
> daniel (ttyp5) [Logout]
> HAMBURG (ttyp5) [Login]
> Pinox (ttyp2): nope either
::: snowy (ttyq2) [Login]
> Pinox (ttypd): great, that it is :*)
> The Kids of Fame (ttyq7): rmail
> root (ttyp9): are ya doing ?
> Cletch)
::: god (ttyp3): Hi Cletch (ttyq7): amnis medical database: 02099
> PVC (ttyq7): nee
> root what are busy!
> daniel (ttyp2): just testing.....
> dr.boo
> Pinox (ttyq7): nee
> Cletch, how are you want my account and cheaper..
> dr.boo (ttypa): ^@^@^@^@^@
> HAMBURG (ttyp6) [Login]
::: Cletch (ttyp5): ^]
::: Pinox!
> \ (ttyq1): Yep. they jackass next to me
> Cletch
::: Cletch, how was the modem??
> Cletch (ttyp3): Hi Pinox (ttyq2): from ?Cletch (ttyq3)
> \ (ttyp3): Hello too
> HAMBURG (ttypd): SYS: Signon mari
è > Cletch (ttyp3): whats 051 Dr.boo (ttyp6): l
> Dirty Harry (ttyp3): ss
> snowy (ttyp3): whats not funny !
::: hnjoname (ttyp5) [Logout]
> PVC (ttyq3): hey whe have an outside line seems to work
> daniel (ttyp5) [Logout]
> HAMBURG (ttyp5) [Login]
> Pinox (ttyp2): nope either
::: snowy (ttyq2) [Login]
> Pinox (ttypd): great, that it is :*)
> The Kids of Fame (ttyq7): rmail

```

```

> root (tty9): are ya doing ?
> Cletch}
::: god (tty3): Hi Cletch (tty7): amnis medical database: 02099

> PVC (tty7): nee
> root what are busy!
> daniel (tty2): just testing.....
> dr.boo
> Pinox (tty7): nee
> Cletch, how are you want my account and cheaper..
> dr.boo (ttya): ^@^@^@^@^@
> HAMBURG (tty6) [Login]
::: Cletch (tty5): ^]
::: Pinox!
> \ (ttyq1): Yep. they jackass next to me
> Cletch
::: Cletch, how was the modem??
> Cletch (tty3): Hi Pinox (tty2): from ?Cletch (tty3)
> \ (tty3): Hello too
> HAMBURG (tty

```

```

olinkLines:240Code:2503Const:2503Const:252
Data:15780ARTburostuffSerialNo:724Pass1
Pass3Name:DEFORMLines:240Codesize04130
Startaddress0991Datasize04130Stacksize
04000Executablefiledfml0msd.OBJCode:2503
Const:252Data:15780ARTburostuffSerialNo:724

```

```

root (tty9): besides: awfull. you now > uschi (tty9): haha,
. sascha im awfull. Never eaten just
with. > uschi (tty9): Poor guy wrote
my terminal o ::: mod (tty9): HaHa. >
Sascha (tty9) [Login] > uschi (tty9):
Ok just ry some \6&#x2013; > uschi
(tty9): j m (tty9): hi uschi
(tty9): the e - i'm waiting with one
"l", i hink s . > uschi (tty9): q >
uschi (tty9): w mine doesnt work >
uschi (tty9): come pacifists here are
somethink so. > Sascha (tty9): no, not

```

è

```
joem (ttypc): firt: i mind spelling. >
Sascha (ttypc): here are still didn't
that about him (maybe a nice guy) >
uschi (ttypc): joern ? i've got to my
terminal says that do you now get away
to get away for a Test. ::: root
(ttypc): firt: i mine doesnt work >
uschi (ttypc): Its realy confusing >
sascha (ttypc): Answer > Sascha
(ttypc): ah. it's up down there is
written such tainted 'food' > Sascha >
sascha (ttypf): dont matter about
sascha why don't that do you bloody
bastard > uschi (ttypf): tks > Sascha
(ttypc): joern is a "dummy" > root
(ttypc): joern - what's sure > uschi
(ttypc): hello am i joem(ttypf): why
```

olinkLines:240Code:2503Const:2503Const:252

Dat 780 ur t fSerialNo:724Pass1

Pas 3Na e: EFORM i e :240Codesize04130

Sta tad re 99l ata ize04130Stacksize

040 ecu ablef led m10msd.OBJCode:2503

Const:252Data:15780ARTburostuffSerialNo:724

```
dont your written just with one "l", i
thing too > joern is using my name you
now?. > uschi (ttypc): joern is a Test.
::: mod (ttypc): w > Sascha (ttypc):
haha, sascha > sascha 3 > Sascha
(ttypc): Ok just to my name > uschi >
Sascha? > uschi (ttypc): Its realy
confusing form my terminal says that
about him (maybe a nice guy wrong >
uschi (tty3) [Login] ::: root (ttypc):
here any more qualified talk here,
let's now > uschi (ttypc): the meal
tastes awful is a guy using > uschi
(ttypf) [Login] > uschi (ttypf): haha,
sascha > uschi (ttypf): sascha (ttypc):
HaHa. > Sascha (ttypf) [Logout] :::
joem (ttypc): He is writtention: that
mine doesnt work > uschi (ttypc): what?
```

```
::: root (ttyp2): you still not joem
(ttypc): no, not yet > uschi (ttypc):
olinkLines:240Code:2503Const:2503Const:252
Data:15780ARTburostuffSerialNo:724Pass1
Pass3Name:DEFORMLines:240Codesize04130
Startaddress0991Datasize04130Stacksize
04000Executablefiledfml0msd.OBJCode:2503
Const:252Data:15780ARTburostuffSerialNo:724
```

```
well me any more qualified talk here,
lets eaten just work > uschi (ttypc):
hello am i joem not on there is out
spell
```

```
o.box10096==+1001 EB.Amsterdam==+ARTBuro+31.20.204963==+Host
online sometimes==+++=User may Password: Horseless Carriages May
.OP
```

ALL INFORMATION IS DEFORMATION MORE INFORMATION MEANS MORE CHAOS MEANS
MORE
CHAOS MEANS MORE NOISE

èDE MATE EN ERNST VAN DFM WORDT STEEDS MEER ERKEND

COMPUTERS MELT TOGETHER W MACHINESFUSING THEM TO TELEVISION TELEPHONE
TELEX
TAPEREORDER VCR LAZERDISC BROADCAST TOWER LINKED TO MICRO WAVE DISH
TO
SATELLITE PHONE LINE CABLE TV FIBRE OPTIC CORDS THE HUGENESS THE HUMMING
A
TORRENT OF PURE LIGHT A SEMIOTIC WEB A GLOBAL NERVOUS SYSTEM THINKING
FOR
ITSELF LET7 LETS GET OUT OF TIME CYBER PUNK EXPLORES THE IRONY OF
THE
PROSESS OF ADOPTING NEW WAYS OF SEEING THAT CONSEQENTLY PROPOSE NEW FORMS
OF
SOCIAL ORGINIZATION THATBECOME PARADOXICAL . OR CONY
CONTRADICTI
CONTRADICTORY ^ DO TECHNOLI TECHNOLOGICALLCHANGES INTRODUCENEW FORMS
OF
CULTURSE NW NEVER STRIKE WHERE YOUR OPPONENT IS BUT STRIKE
AT
THE SPACE THECY WILL OCCUPIE IN THE FUTURE

WHO IS WHO?

- Patrice RIEMENS (Amsterdam/NL) is geographer and traveller. Writes about development economics and modern French philosophy.
- Suzan UGURSOY (Koln (Cologne)/FRG) heads a community association and edits "Chip Generation", a magazine for Turkish / German youth. She is a specialist on vicious/racist computer games.
- Steffen WERNERY (Hamburg/FRG) is a computer specialist and leading member of the Chaos Computer Club. A major proponent of information openness, he has become of own experience a specialist on official secretivity and repression as well: the ire of Philips France, when their ill protected system was entered, put him behind French bars for 2 months.
- ALTERNATIK/ CIII /
TERMINAL Paris-based network (by Minitel), association and journal concerned with the social consequences of information technology. They foster a critical attitude towards computers and develop alternative uses of hi-technology.
- TERMINAL Magazine on technological culture, published in Paris.
- BILWET Amsterdam-based very flamboyant "Association for promoting the practice of Illegal Science". Their hi-profile brand of underground activities include lecture tours, seminars, radio & TV programs and various publications.
- CHAOS COMPUTER CLUB This club of German hackers (founded 1981) soon became a legend thanks to a few spectacular and well-published hacks (Btx, various VAX/VMS systems world wide - the NASA-hack a.o. - and the pseudopilfering of the Hamburg Saving Bank). Their magazine "Der Datenschleuder" and their books "Hackerbibel I & II" (convey the message "use public data freely, protect private data

strongly"). Due to the German socio-political climate, the CCC is increasingly viewed as a (radical) political movement, with consequent harassment at the hand of officialdom.

- DATENSCHLEUDER Magazine published by the Chaos Computer Club
- ARTburo HÆVTIES specializes in counter-cultural demontage and multi-media entertainment: image/sound/lights/odors.
- RAVIJN Publishers A recently started Amsterdam critical publishing house. Among their releases: a photo-book on Palestinians, a book on Apartheid and one on police politics in The Netherlands.
- 2600 MAGAZINE The New York based leading American publication for "phone phreaks". They have a track record in exposing devious practices and policies of the major telephone companies.
- HACK-TIC Dutch hacker magazine, first appeared in January '89, spreads technical knowledge for computer hackers and phone-phreaks. HACK-TIC is co-organizer of the GHP / ICATA '89.
- Daniel DE ROULET (genève/CH) is author of the computer-thriller "Ne comptez pas sur nous" (Don't count on us"). He also developed and now heads a major medical computer system.
- John DRAPER (alias "Captain Crunch") (San Francisco/USA) is probably the best known telecommunication-specialist" in hacker circles. His "forbidden knowledge" landed him several times in jail. He works now with AUTODESK INC. on computer aided design and pursues his own advanced research.
- Lee FELSENSTEIN (Berkeley/USA) has a long history of grassroots technological activism and is co-founder of the famous "Community Memory" project in San Francisco. He is in contact with the San Francisco / Moscow Teleport, a USA / USSR network system, trying to set up a shared software development

computer system. Felsenstein is currently engineering a totally new computer concept, the "Cyberpunk".

Cees HAMELINK

(Amsterdam & Nairobi/Kenya) is Professor in Communication Science at the University of Amsterdam and the ISS in The Hague. His research focuses on power and influence in the media, hardware/software balances in communication politics, and the activities of information multi-nationals, especially with regard to the "Third World".

Wau HOLLAND

(Hamburg/FRG) is a reputed system developer and analyst and a keen advocate of computer-"Glasnost" in society and government. He is a leading member of the "Chaos Computer Club".

Hans HUBNER
(alias "Pengo")

(Hamburg/FRG) is a computer specialist who was recently involved in a "know-how transfer" with the KGB. Though the deal allegedly involved payment of 1.E5 DM, the information concerned is rumoured to have been entirely of public domain nature.

Marieke NELISSEN

(Amsterdam/NL) teaches and develops computer systems for the municipal corporation, and is active in spreading computer literacy among women.

P.M.

(Zurich/CH) is an author and techno-anarchist. His books include "Weltgeist Superstar" (Karl Marx is ET) "Tripura Transfer" (a post atomic tale) and the radical utopia "Bolo'bolo".

Theo WAMS

Is a member of the Dutch "environment defense" group and is an expert in the field of waste management in the computer industry.

Dr. Kwame BOAFO

(Nairobi/Kenya) is a communication expert, at the African Council of Communication Education. He is a specialist in the field of telecommunication planning & implementation.

- Peter KLERKS (Amsterdam/NL) is a political scientist who has specialized in privacy and the politics of police and intelligence agencies. He is the author of "Terreurbestrijding in Nederland" (Ravijn, 1989)
- Werner PIEPER (Lorbach/FRG) is a publisher specializing in underground books and media experiments. He is the editor of the Chaos Computer Club's "Hackerbibel" (1988).
- Bernd FIX (Heidelberg/FRG) is astro-physician and leading member of the Chaos Computer Club. Author of a crypto-programme and virus specialist.
- Gerard de ZEEUW (Amsterdam/NL) is professor in andragology at the University of Amsterdam. As a social scientist he specializes in computer application & development, user languages and cybernetics.
- Rolf SNIJDERS (Utrecht/NL) is a medical biologist specialized in brain & behaviour. He is a communication trainer for neurolinguistic programming and is a specialist in the field of knowledge elicitation for expert systems.
- Allan LUNDALL (USA) is the top American expert on computer-viruses. His most recent book, VIRUS! will be presented at the conference (to be confirmed).