

## A personal history of CMC (Computer Mediated Communication)



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1972:

Horror stories about use of computers to spy on people

*"The credit card records show that John checks in with his wife into a hotel in London at the same time as his wife pays her hairdresser in Sweden"*

WHAT I LEARNED:

What is important?

- To protect personal privacy against spying computers?
- That people can control their own life

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1970:

Gordon: P.E.T.: Parent Effectiveness Training

A book about how parents should solve family problems and train their children to become good people

WHAT I LEARNED:

- Listen to each other
- Understand each other's views
- Show that you understand each other
- Find win-win-solutions

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1973:

Swedish Data Act

- It is illegal to store personal information in computers without permission by the Data Inspection Agency
- Every field type must have a specification of what kind of personal information can be stored in that field
- Storage of information about religious and political beliefs (illnesses, sex life, etc.) is only allowed under special circumstances
- Exception: Use of computers for typesetting

WHAT I LEARNED:

Politicians are not willing to see farther than their noses

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## 1974: The General Public Information System

### Allmänhetens informationssystem

<<http://info.dsv.su.se/~jpalme/reports/general.html>>

Computers can be used to control people, or to give people more information and control over their own lives.

We must try to find uses of computers which give anyone easy access to lots of information, computers should open up information, not restrict information.

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## 1974: Arne Grip: ADB-system och kommunikation (Hermods-

### studentlitteratur 1974)

What I learnt (not all of this taken from the book):

- All computer usage is communication between humans
- Running a program is communication between its designer and its user, just like reading a book is communication between the author and a reader
- Computers can be used to control and regulate communication, by specifying what information can and cannot be transferred, by whom, to whom.
- In his book 1984, Orwell invented a new language, newspeak, in which forbidden utterances could not be stated. Compare rules about improper language in human communication.
- People feel strongly about language, because language is their tools for controlling their living conditions. Taking away language from people is taking away their power and security.

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## 1970-s: The three truths of the 1970-s

- ⇒ Impoverishment of work tasks
- ⇒ Invasion of privacy
- ⇒ Industrial competitiveness

### WHAT I LEARNED:

The only way to get people to understand that computers can aid people instead of controlling them is to show them practical applications.

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## 1975: Seeligman: Helplessness (Freeman, San Francisco, 1975)

A study of human depression showed that depression is strongly correlated by a feeling of helplessness, a feeling of not being able to control your own life.

### WHAT I LEARNED:

Computer can cause this feeling, if the user feels that the computer (in reality, its designer) restricts the freedom of the user.

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1988

Donald Broady: Kulturens fält. Om Pierre Bordieus sociologi (in Masskommunikation och kultur, Nordicom 1988) and Desmond Morris's books

Human beings like to belong to groups with similar language, culture and values as themselves. Such groups give them a feeling of security and acceptance. Members of such groups tend to favour each other and to belittle and disparage the cultural utterings of people outside their own group.

#### WHAT I LEARNED:

Those who have control of computers tend to favour their own, those who are threatened by not having control of computers tend to disparage computer-oriented cultures.

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1975:

Murray Turoff comes to Sweden

*“A computer is like a book with white pages. Any user can write what they like on these pages, and any other user can read what has been written.”*

(This may sound self-evident today, but it was not at all self-evident when Murray Turoff first said it.)

Murray Turoff introduced us to the *conference system paradigm* of software design.

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1975:

C.A.R. (Tony) Hoare: Software Design —a Parable (Software World, vol. 5, no. 9-10)

1. Computer software grows by adding more and more facilities.
2. This process is often strongly controlled by the present users of that software.
3. Through long experience with using the software, they master its usage and all its commands.
4. But computers by nature are restrictive, they only allow what their software is designed for.
5. Thus, the experienced users ask for new commands and facilities, and the developers give this to them.
6. Old software, which has gone through many such stages of evolution, tend to be very complex, with lots of commands, difficult to master for beginners.
7. Thus, strong user influence on software development can create a culture which frightens novice users away.

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1975-

1990:

EIES, Murray Turoff and Starr Roxanne Hiltz

The first software in this category was EMISARI invented by Murray Turoff in 1969, and another well-known software was Forum-Planet, invented by Jaques Vallee in 1971.

The EIES system, invented and set up by Murray Turoff in 1975, was very influential in developing the new ideas. Around EIES grew a community of users and a community of developers who invented and tried lots of novel ideas of organizing human communication. EIES was also the basis of much groundbreaking research on the effects of CMC.

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1977-  
1978: STU (today NUTEK): Forum-Planet, Consumer Information Systems

Tomas Ohlin was a person who strongly believed in the new ideas. He was responsible for getting Murray Turoff to Sweden, he arranged for Forum-Planet to be installed in Sweden, he arranged for a number of prototypes to be developed to show how computers could be used for giving more information to more people, for example in the area of information for consumers.

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1978: KOM forbidden by the Swedish Data Inspection Agency

The Swedish Data Act, as it looked like in 1978 (and to a large extent still today) makes almost all storage of plain text information about humans in computers illegal. I noted this in a debate with Jan Freese, the director of the Data Inspection Agency and the creator of the Swedish Data Act. He said that these problems should be solved, and I should apply for permission.

After several talks to people in the Data Inspection Agency, I applied for permission to use the KOM system, and stated in my application that we could not, in advance, prescribe exactly what people would want to write about in their messages to each other.

Result: Our system was forbidden by the Data Inspection Agency.

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1978: Turoff and Hiltz: The Network Nation

This revolutionary book describes a future society in which computer networks plays a central way in opening up new vistas for human-human communication and information exchange. It is a description of what Internet is beginning to become today, written more than a decade earlier.

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1979: KOM allowed with humiliating conditions

My employer at that time (FOA) did not dare to appeal the decision. Instead, they negotiated a settlement which allowed KOM to be started on the following conditions:

- All messages must be deleted after two years.
- Personally addressed messages must be deleted after one month.
- No search is allowed on personal information in message texts.
- No messages may contain information about political or religious beliefs, or information about a person's health, sexual behaviour, etc.
- FOA was to make a study of the effects of KOM on its users, and make a continued application for permission after two years.

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1980-s: BBS-es

The first Swedish BBS-es appeared, many of them with software functions copied from KOM. Most of them were based on personal computers, many could only handle one user at a time.

1981: NADA: Everyone must read this!

1981: KOM: Which meetings does N.N.: subscribe to?

1981: Digital: Should sender be allowed to check if his messages have been read by their recipients?

Invasion of privacy?

KOM in 1980: Anyone can see a list of the meetings any other user is a member of, and a list of the members of a meeting, and see when each member last visited this meeting.

At NADA: The director of studies distributed on paper a copy of the list of members of a meeting with the added statement: All teachers at NADA must read the news in this meeting.

1980-s: Mammoth BBS-es: Prestel, Minitel, Usenet News, CompuServe, the Source, the Well, Bix, Teledata, TeleGuide

Many people had the same ideas of using computers to make more information available to and exchanged between ordinary people.

Little success: Prestel, Teledata, TeleGuide, etc.

Restricted success: KOM, Usenet News, the Well, Bix, Teleguide, CompuServe, Prodigy, the Source, America Online. Universal success: Minitel, and, much later in the 1990s, the Internet.

Why did Minitel and the Internet in the 1990s succeed where so many others failed? Because of the lack of central control and the market structure of these two nets.

1981: Connection between OZ-KOM, NADA-KOM and ADB-KOM

Simula experience meeting

Researchers wanted to discuss use of Simula

Students wanted to discuss Simula versus other languages, like Pascal

## 1982: New Swedish Data Act: No understanding

I wrote a bill to the Swedish parliament, together with Olle Wästberg, that the parliament should, while making other changes to the Data Act, make a statement saying that the implementation of the Data Act should be done with careful consideration of the freedom of speech. The motion was denied with no given reason.

### WHAT I LEARNED:

Do not believe that politicians want freedom of speech. They only want freedom of speech for themselves. Computer users were at that time a pariah whose human rights could be violated.

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## 1982: First Swedish indirect connections to the Internet (KOM, Usenet News)

### 1984: KOM for hobby computer users

SE-banken sponsored our very expensive transatlantic transfer of messages between the Internet and KOM.

QZ established a special, low rate for use of KOM by hobby computer users after 20:00 in the evening.

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## 1982: Humiliating conditions on KOM withdrawn partly

The Data Inspection Agency allowed us to keep personal messages for longer than one month. But all messages had still to be deleted after two years. They also lifted the restrictions on political and religious discussions.

Their given reason: Since no processing can be done of the message texts, they were not personal files in the meaning of the Data Act. But a year later, they allowed us to do searches in the message texts, i.e. processing of the data!

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## 1980-S: Automatic software not liked

Case 1: Sorting of conferences in a personal priority order.

Case 2: Recognition of commands in ordinary text (get encouragement, get scolding)

Case 4: Get user description in 10th session.

Case 3: Basic and advanced mode.

### WHAT I LEARNED:

- Do not try to make computer software more intelligent than it can be.
- People want computer software to be predictable.

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## 1985: Viruses, crackers, Aftonbladet

We began to hear about computer viruses.

Crackers tried to log in to the KOM computer. The access system warned us immediately, and they never succeeded.

Aftonbladet ran a number of articles claiming, falsely, that the crackers had succeeded. Their faulty statements were repeated by many other newspapers, our denials were not published.

The reporter at Aftonbladet was sentenced with a very light sentence for attempt at illegal misuse of computer information.

### WHAT I LEARN'T:

- There is evil also among computer users.
- Newspapers have no interest in the truth, only in saving their skin and increasing their sales.

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## 1986: Why people use CMC

"KOM is like a living encyclopedia, where you usually get many answers in a short time."

"You can even put a question in the middle of the night and get reply within a few minutes."

"We could not get the Swedish national characters printed on our printer. This plagued us for months, until I put in a question in KOM. Within a few hours, I had the solution."

"If you have special interests, you may only be able to talk about them to yourself. KOM has for me become the channel for contacts with alike-minded bout within and outside of my work."

"KOM is something of an elite group: everyone of importance in the computer area can be found in KOM. You can reach people of importance. I have regular contact with some of the most qualified experts in the country through KOM."

"The contacts through KOM got me into my work as computer consultant."

"I have contact with like-minded people, with the same burning interest for computers as I have. These contacts have several times grown into personal contacts with new friends."

"You regularly meet people you did not know before, and exchange very much information".

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## 1986: Eskil Block slanders Maj Wechsellmann

Eskil Block, a futures researcher at FOA, became a very active user of KOM, wrote a very large part of all messages (about 1 percent). His dominance caused disruption of the human-human communication. In some cases, additional, parallel conferences were opened for discussion of "the topic without Eskil Block".

One claim by Eskil Block was that the prominent Swedish film maker Maj Wechsellmann was a Soviet spy. This caused scandal articles condemning KOM in newspapers and TV programs. Very little opportunity to get retractions and corrections published. Eskil Block was sentenced for slander to pay 15000 kronor in damage to Maj Wechsellman.

### WHAT I LEARN'T:

Mass media want to protect their monopoly on information exchange by scandal writings about competing media.

A manager of a messaging system has to do some censoring of what is written, relying on the legal system is too late.

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### WHAT I LEARN'T:

## Why people use CMC

Status and self-esteem

Communicate with experts and qualified equals

Confidence, competence

Keep up with progress, not slide behind in your area of expertise

Communion, comradeship

Inspiration

Exchange of ideas with other people, which will inspire yourself

Generosity

Help others, feel that others appreciate your help

See URL <http://www.dsv.su.se/~jpalme/why-people-use-cmc.html>

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**1990-s:** Internet, World Wide Web, First Class, Lotus Notes

**1991:** SuperKOM

Graphical user interfaces

Graphical messages

Data base integration

Replication

The big American software companies take over. Are there any openings for research development any more?

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**1995-1997:** Ethics of the networks, spamming, rough justice

**1997:** Swedish BBS law proposed

There is evil in humans also on the networks.

Cancelbots, spam filters, virus filters.

Swedish BBS law proposal: The service provider is responsible, also for closed groups.

#### WHAT I LEARNNT:

Rough justice more effective than legal action. But legal help would be useful, if the lawmakers were willing to listen to us and help us with our problems instead of making laws which will not work.

**Not:** Put all the burden on the service provider.

**Instead:** More efficient way of finding the perpetrators, require spam marking of spam messages.

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**1995-1997:** Risk project

Trying to use e-mail and Usenet News for information exchange between researchers and society about risk research.

Moderate success the first half year. Then a saboteur got into the system, and frightened other users away.

#### WHAT I LEARNNT:

“Open for everyone” does not work anymore.

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**1996-1998:** Web4Groups

An EU-funded research project with partners in Sweden, Finland, Austria, Italy, England, Switzerland, Hungary.

- Web-based conferencing.
  - HTML-formatted messages.
  - Annotation facility.
  - Multi-language support.
  - Joint editing.
  - Voting facility.
- Controversial issues:
- Number of roles and permissions
  - Example: Conference in which you are not allowed to unsubscribe

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## 1998: Conclusions

Computer usage is communication between humans.

Human communication is a sensitive area.

Restrictions and “newspeak” should be avoided.

Humans should get freedom to express themselves and to adjust their actions to new circumstances.

Software should not be designed to give unfair advantage to the most experienced users.

Programmer egotism must be recognized and countered.