

Profile

Tele-Cottages in the Nordic Countries

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Abstract: The first Scandinavian Information and Community Service Centre (tele-cottage) was established in Vemdalen, a small village in the middle of rural Sweden, in September 1985. In the tele-cottage local people have access to new information technology on a cooperative basis, thus making them independent of the distance to economic, administrative, educational and cultural centres. The tele-cottage concept has now spread to the rest of Sweden, Scandinavia, and a number of developing countries.

This article outlines the history, functions and organization of Härjedalens Telestuga, the first tele-cottage, and discusses the current and future opportunities afforded by tele-mttages in remote areas of the world.

INTRODUCTION

In the small Swedish village of Vemdalen the visitor can witness an unexpected sight. On the first floor of the building containing the local general store a considerable number of modem computers and other equipment are being used diligently by local people from 8 o'clock in the morning until 10 o'clock in the evening. The equipment is worth a closer look: PC AT's(TM), fifteen personal computers from the U.S. and Japan, word processors and teletexts from Holland, Telefax, Videotex, in short, lots of high technology in the heart of a sparsely populated mountainous part of Sweden (Vemdalen today boasts having more computers per capita than any other part of Sweden).

The first Scandinavian tele-cottage, Härjedalens Telestuga, was opened here on September 13, 1985, and shortly after its inception, all this equipment was being used

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by 15 percent of the people in the village, with everyone from 10-year-old children to pensioners represented. The funds for establishing the tele-cottage came from the County Government Board as part of a project for the propagation of modern technology in sparsely populated areas, Swedish Telecom, and the municipal board. The aim of the tele-cottage was to open up the vast opportunities of the information age to the people in this remote part of Sweden (where there is less than one inhabitant per square kilometre), by providing access to a variety of computers and modern telecommunications equipment for anyone willing to invest time and energy in learning how to use hardware and software.

Modern information technology has, for the first time in history, given people in remote regions of the earth the opportunity to overcome their worst handicap: their distance from the centres of learning and development. The new information technology may lead to further centralization and to the development of a comparatively small elite, worldwide and in each country. However, if used in the proper way, it may also further decentralization and the development of local democracy. In the Nordic countries, governments are eager to prevent the cities from growing too large, and the grassroots drive towards local democracy is very strong indeed.

THE FIRST TELE-COTTAGE: HÄRJEDALENS TELESTUGA

The region of Härjedalen is located in the middle of Sweden—a country 2000 kilometres in length—and borders on Norway. It is part of the administrative province of Jämtland which once was a part of Norway and thus belonged to the Danish crown for approximately four hundred years. During the period of violent altercations between Denmark/Norway and Sweden, the Scandinavians became involved in the Thirty Years' War. The Danish king, Kristian IV, had scant success, whereas Protestant Sweden joined forces with Catholic France and triumphed, though the Swedes lost their gallant king. On their way back from the European continent, the victorious Swedish generals conquered Denmark, and as a result of the peace negotiations at the village of Brömsebro in 1645, Denmark was forced to surrender Jämtland/Härjedalen to Sweden.

Even today Härjedalen is a remote part of Sweden. The inhabitants have taken advantage of their mountains and have transformed some villages into skiing resorts, and as Jämtland/Härjedalen is one of the few mountainous regions of Sweden, tourists abound during the high season months of February to April. The region is rich in large forests of pine, fir and spruce, and in the moors peat is found and ensures work for a number of people. However, tourism is stagnating, there is no pulp industry, and the old craftsmen are a dying breed. The young people of Härjedalen, although loving their beautiful countryside, are often forced to leave their mountain-community to take up work in the industrialized parts of Sweden around the cities of Stockholm, Gothenburg, and Malmö.

The northern parts of Sweden have lost a large number of inhabitants in the last decades. Moving vans, on their way from the sparsely populated areas in the north and west of Sweden towards the southern and eastern regions of the country, a frequent

sight. Swedish governments have for many years tried to halt the stream of people entering the cities, but these efforts have largely been in vain. The County Government Board of Jämtland realized that more efficient measures were needed, and the socialist government of Sweden allocated the sum of 10 million Swedish kronor (CDN \$2 million) to encourage the diffusion of new technology in the province.

The Jämtland County Government Board and the University College of Östersund, in close cooperation with the Nordic Council of Ministers, arranged a seminar in April 1985 for participants from the Scandinavian countries. The seminar was held at Östersund, the main town in the province. One of the speakers at the seminar was Mr. Jan Michel from the village of Fjaltring in Denmark. In an inspiring speech he announced his idea of establishing 'tele-huse' in sparsely populated parts of Denmark. His thoughts were eagerly adopted by some Swedish participants and a committee consisting of high-ranking officials of the County Government Board and the University College, in addition to myself, began discussing a Swedish model. The Swedish Televerket, responsible for all telecommunications in the country, saw the considerable potential of the idea and its local director joined the committee. Subsequently, a decision was made to start up 'Härjedalens Telestuga', the Electronic Village Hall of Härjedalen, as soon as possible. A document, adopting many ideas from the Danes, established the aims of the tele-cottage (as it is now called) as follows:

- 1) to give the local population the chance of using modem technological equipment, thus removing their fear of the computer and their resistance to it;
- 2) to help local tradespeople in purchasing the right kind of equipment, suited to their needs;
- 3) to educate a large number of people in the use of modem computers, thus making them independent of the distance to the cultural centres and facilitating their access to the information age;
- 4) to further local democracy; and
- 5) to increase international cooperation.

Local politicians in the community were quite skeptical about the project in its first phases. The committee had drawn up a budget of SEK 700,000 (CDN \$150,000) for the first six months, but the local officials showed no inclination to contribute. As the local papers, the local radio, and local entrepreneurs praised the project, however, the mayor and his colleagues had second thoughts. The budget was extended to one million Swedish kronor (CDN \$200,000), and the community council voted unanimously to contribute 400,000 SEK (CDN \$85,000) to the Telestugan. In the end, the local politicians chose not to leave all initiative to the County Government Board, and to the Televerket which provided 300,000 SEK (CDN \$65,000), primarily in the form of equipment (Teletex, Telefax, Videotex, and some personal computers).

From the very start, the idea of the tele-cottage has met with considerable interest inside and outside Sweden, and when the Telestugan was officially opened in September 1985, we were happy to receive delegations from Denmark, USA, Norway, Italy, France and the UK among our guests. A delegation from the OECD attended, including former British Cabinet Minister Mrs. Shirley Williams, MP, and the EEC's Mr. Lars

Qvortrup. A seminar was held and the Härjedalen papers wrote considerably on the opening. It is estimated that more than 50% of the local population attended the official opening of the Telestugan by Professor Inez Sperr Brisfjord of Long Island University.

No idea is right unless it appears at the right moment, says Alvin Toffler. The idea of the Tele-Cottage was indeed introduced to the people of Härjedalen at the right moment. A civil servant from a neighboring village expressed the general feeling in the following terms: "Some ten or fifteen years ago I heard a tiny noise behind me; the computer was said to be of importance for everybody in the future. Today I have the feeling that the noise has increased and has overtaken me. I risk being left behind if I do not catch the train in the very last moment".

Härjedalens Telestuga has created new life and a spirit of optimism in the region of Härjedalen, and the idea of Jan Michel has spread. Since its opening, several study groups from other parts of Sweden have visited each month, and many of these groups have told us that they returned to their home to create their own tele-cottage. In the province of Jämtland, for example, two new tele-cottages were started in November and December 1985. Norwegian Television spent a day in the Telestugan filming the activities and interviewing a number of people, and the resulting programme was shown on Norsk Rikskringkasting on a Sunday evening in December 1985. The very next day, a group of people from a village outside Bergen telephoned to establish contact, and a new Norwegian Telestugan project was on its way. A Danish project also was initiated around that time. The tele-cottage seems to have marked the beginning of a new spirit of optimism and entrepreneurship on our old continent. It is my considered opinion that there ought to be many tele-cottages all over Europe if we are to maintain our independence vis-a-vis the superpowers in the information era.

CURRENT FUNCTIONS OF THE TELE-COTTAGE

Infoteque

A tele-cottage is organized to offer courses in the handling of modern computers and telecommunications equipment, teach people how to search for relevant information in national and international databases, and provide access to computer-aided learning materials and to a wide range of hardware and software. Such an 'infoteque' could combine the functions of the local library, the school library, the tele-shop, the post office, and the communications centre. (In many small villages the population is so small that the costs of providing library and public mail services are almost prohibitive) .

In the first tele-cottage, over 20% of the local inhabitants have taken one or several courses, and the participants have come from all walks of life; small scale entrepreneurs and/or their spouses, shop assistants, farmers, craftspeople, and children. We started having 'Open House' on Friday afternoons for the children, in the hope that after having tried a number of computer games for some months, they would express a desire to learn more substantial information. They started asking for courses after six weeks, and when we gave the pupils in the 4th, 5th, and 6th forms of the village school the offer of two lessons a week, 16 out of a total of 21 children joined the course. When

their older brothers and sisters heard about it, we were forced to start courses for them as well.

The aim of the present general education at the tele-cottage is to create a demand for specialized courses in bookkeeping, planning, calculations, word processing, communications, computer-aided design, and many other subjects.

The tele-cottage in Vemdalen is equipped with a combined television/videotex set. A rather large room has been cosily furnished with locally manufactured furniture and a large TV set. In this room all villagers are welcome to watch TV programs received from satellites (with programs in English, German, and French, and plans for reception of still more satellite signals). Between television programs, Videotex provides relevant information on subjects of local interest: the agenda from the last meeting of the community council, information from the County Government Board, information on vacant positions in the district, and so on. Many small villages today have no natural meeting place for the villagers. Pubs, for example, are rare in rural Sweden. In the village of Vemdalen, the drawing room of Telestugan is being used every day by a considerable number of people.

Another advantage for the locals in having the Telestugan so near is the fact that they are welcome to use the computers in a separate room, either for training — many people drop in when they have finished shopping in the grocery store, while others use their lunch break for reviewing the previous night's lessons — or for doing their bookkeeping. In the drawing room they find technological papers and magazines, and people with whom they can discuss the implications of the information age for their community and for themselves. During these discussions many new ideas are launched, some of them to disappear again, others to be translated into real-life undertakings.

The tele-cottages should be run by local people. They constitute a grassroots movement, possibly the missing link between little populated, remote areas of the world and the centres of information. If the cottages are indeed to be this 'missing link' in developing countries, for instance, it must be clearly shown elsewhere that the new technology can be adapted to the users and their needs, and not vice versa. It is very important that the new technology, as used in the tele-cottages, is accepted by the population of the Northern European countries as part of their own cultural heritage. In this, the tele-cottages have been seen to work dynamically in sparsely populated areas. In a village where barely two years ago people in general did not dare touch a computer, using the modem equipment is now the most natural thing in the world.

Employment Creation and Service to Small-Scale Enterprise

The Telestugan employed five persons shortly after its opening, and this number has increased recently. From the beginning it was decided to establish, in connection with the Telestugan, a number of jobs where people could sit at home, each working with their own computer connected to the main computer in the tele-cottage. This kind of work was initially viewed with distrust by the unions if it meant that individuals were to be doing some kind of low-paid homework for large corporations, as such workers are easily exploited in their isolation. The trade unions have followed the Vemdalen project closely and have now given their consent to placing distance-work from the cities in the tele-cottages, as the employees are ensured their rights and social

contacts. In the framework of the Telestugan they are also ensured just wages, and they will be members of the Telestugan staff. They can work at home if they prefer to do so, for a shorter or longer term, but they can also join their colleagues in the tele-cottage if they feel so inclined. The climate in the tele-cottages is warm and supportive. In any case, the Telestugan maintains close cooperation with the trade unions, one of which, the TCO, has formally signed an agreement on joint education with Härjedalens Telestuga.

The Telestugan also offers service to small and large enterprises in the region. Letters, offers, drawings and other documents are sent by Telefax after instructions are given by phone. The Telestugan provides help in translating offers and letters into a number of foreign languages, and the documents reach the addressees in a few seconds by Telex. Smaller enterprises can in this way benefit from the new technology without having to invest in costly equipment, and many firms, clubs and associations already use the services of Härjedalens Telestuga. The tele-cottage even functions as an office for certain small enterprises and, not being in the pay of any computer manufacturer, also offers fair and balanced advice on the purchase of hardware and software, while providing support to those who have bought computers and software. The service to small-scale enterprise has been much used and greatly appreciated, and has attracted several export orders to the region. The School of Administration and other departments of the Swedish Army are using the tele-cottage as a supplementary office. Distance is now not measured in miles, but in minutes and seconds; however, many large firms have still not realized the possibilities of sending work in peak periods to the tele-cottages.

The initial investment in the Telestugan was one million Swedish kronor (CDN \$200,000). It was from the onset expected that the project should receive more funds in the beginning of 1986. From the first day, however, Telestugan was entrusted with the task of preparing computer/plotter programs for a large project aimed at utilizing some of the numerous moors of Härjedalen for the production of peat. By referendum it has been decided that the nuclear plants of Sweden shall be closed down by 2010, and the hunt for domestic fuel has already begun. As a result of the work on the peat project carried out in the Telestugan, a new task has been given to us. The aid organization of the Swedish government, SIDA, launched a well-analyzing project in India, and the computer programs for this project are being run in the village of Vemdalen. Our world has really become smaller in this day and age! These two projects plus the educational activities — 90 lessons a week — and the service to local firms have ensured us a monthly income of approximately SEK 150,000 (CDN \$30,000). There is good reason to believe that further grants will not be needed.

A Network of Competence

Supported with funds from the Nordic Council of Ministers, a database is being established to unite the Scandinavian tele-cottages. If the sparsely populated parts of Scandinavian countries are to compete with the sophisticated data centres in the large cities, work which originates there must be of the same high quality. If competition on equal terms cannot be achieved, the remote areas will be forced to accept secondary jobs with less remuneration, and the well-known vicious circle will have started once

again. FILIN — Foreningen af Informationsteknologiske Lokalcentre i Norden, the Association of Nordic T&-Cottages- will operate this database and is also trying to open marketing offices in all capitals and larger cities of Scandinavia. These offices are intended to act as part of the FILIN network as well, to see that work which is available is sent to the countryside. FILIN has today around 30 full members in Denmark, Norway, Finland and Sweden. In Sweden 35 to 50 new tele-cottages are under preparation, and the Norwegian government and Norsk Data are supporting efforts at creating local telematics centres in that nation's countryside. The next FILIN conference is taking place in September 1987 in Thorshavn, the largest city in the Fame Islands in the North Atlantic, and plans for a conference and a seminar in Iceland in early spring are under way.

THE FUTURE OF THE TELE-COTTAGE

The developing world has followed the Nordic experiments closely and with considerable interest. Plans are being made to establish t&-cottages in Papua, New Guinea, Sri Lanka, India, Indonesia, Benin and Nigeria, and in several countries in South America. The International Telecommunications Union (ITU) in Geneva and other international organizations are following the developments continuously, and an international association is being formed. The first general assembly will take place in Geneva shortly.

The government of Sweden has declared the establishment of tele-cottages a top priority in the on-going campaign for the rural areas. At the exhibition at Santarem, Portugal, arranged by the Council of Europe, the Swedish tele-cottage was received with considerable interest, and meetings have been held with representatives from the Greek and the Portuguese Telecom for the purpose of setting up tele-cottages in the rural areas of these countries.

The Council of Europe has adopted the tele-cottage as one of the main themes in the campaign for the countryside, and the idea will be followed up in seminars and conferences all over in the coming 18 months. FILIN is negotiating with many individuals, authorities, computer firms and other interested parties all over the world. The year of the countryside could easily become the year of the European tele-cottage. "Vivons nos campagnes" is the French slogan for the campaign. The tele-cottages contribute to making the countryside more than a place for recreation and a museum for showing how ancestors lived. Through them, we can give the countryside the most important thing of all—a living present and a promising future.