ABSTRACT

An urban Telecommunications Center could offer much to the city of the future. First, it would be a media facilities center, offering materials, classes, and studios for the production of programs. Because it would have a professional staff, the Center would also be a source of expertise to the community. Another function of the Center would be to coordinate and combine community resources to serve the varied needs of the community. Looking further into the future, other functions that the urban Telecommunications Center might be performing 10 years from now could be controlling traffic patterns, providing a two-way-video system for interpersonal communication, and supplying a myriad of other public functions. If these Centers are to function as the coordinators of the future electronic culture, we will have to acquire new skills and understandings to deal with advances in technology. It is hoped that the Telecommunications Center will become a place of art as well as information, so that knowledge can be conveyed efficiently, but with humanity, grace, and humor as well. (SH)
A STATEMENT ON

THE CONCEPT OF AN URBAN TELECOMMUNICATIONS CENTER

by

Robert D. Smith
General Manager

WNVT/TV

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An Urban Telecommunications Center

Marshall McLuhan has compared electronic media to the body's central nervous system. If the analogy is valid, then an urban Telecommunications Center might be regarded as the city's brain. It will be the place where the reflexes of the "body politic" are integrated and coordinated.

It staggers the imagination to project very far into the future just what this electronic urban complex will be like. I'm going to talk in more immediate terms about the urban Telecommunications Center which is already coming into existence, and which may well be the shape of our whole industry within three to five years.

What, then, might a Telecommunications Center be doing for the city in 1975?

First, it will be a media facilities center where all sorts of public groups can come and actually use communications tools: cameras, audio and video tape recorders, film editors, audio mixers, broadcast facilities ...

I can see this Center as a place where media interest groups of all ages -- teen-agers, professional people, housewives and senior citizens -- might be enrolled in classes offering sportscasting, drama, media program budgeting, or instructional design.

I can visualize, too, that the Center might serve as a media
library and duplicating center where individuals and groups might come to preview programs, tape programs off-the-air or off-audio or video recordings, or check out cassette programs on loan.

The Center will, of course, be a program origination point and will have to be equipped with multiple studios for the production of live programming for over-the-air radio and television broadcasting, cablecasting and ITFS transmission, as well as for filming and for recording on audio and video tape.

The studios will be manned by professional staff, but occasionally they will be available for rent to public groups who may at times wish to supply some of their own staff and equipment.

The Center will be a valuable source of expertise to the community in the complex business of helping to fit the medium to the message. For instance:

-- The City's Youth Corps Director wants to show teen-agers how to go about applying for a job. We could help him design and produce video tapes, involving skits with young volunteer actors. Low-budget. In the idiom. Then send it out on ITFS to storefront learning centers throughout the city, with question-and-answer feedback to a job counsellor.

-- The Science Curriculum Supervisor of the Public School System is frustrated because he can't find an existing science series to suit his needs -- say, in geology. He can't afford to produce a series of his own. We locate a good basic geology series on videotape and help him to arrange to supplement it with sequences filmed locally, transferred to videotape and shown in the classrooms in conjunction with the acquired series. Students, under supervision, could help with the filming and tape transfer -- which could reduce costs and add to the learning experience.

-- A group of remedial math teachers are interested in learning how to construct basic CAI lessons so they can make maximum use of time-shared computer terminals which will be available to schools
when the city's cable system is completed next year. The Center helps develop a CAI-design package for elementary math teachers, and the idea takes hold so that other teachers begin to ask for the course. This leads to plans for a dedicated channel for in-service teacher training, to be offered to all schools over the cable under special arrangements with the cable operator. Micro-teaching and special education seminars, and how-to sessions on the use of media in teaching are planned, and credit courses will be offered on repeat schedules.

-- The local Medical Association wants to initiate a regular service for doctors and hospital staffs, up-dating professional information and keeping subscribers to the service abreast of recent medical findings and recommended practices. Because of the proprietary nature of the information, it is decided that -- pending the activation of the cable service -- the information bulletins will be videotaped at the Telecommunications Center and bicycled to local hospitals and medical centers on a monthly basis. When the cable is installed, the plan is to have a dedicated channel for medical service with limited access by hospitals, clinics and doctors' offices. As medical people and the staff of the Center work on plans for the use of the dedicated channel, new plans begin to take shape, and eventually, when 2-way cable service is activated, it is planned that a telemedical consultation service will be initiated, linking a central medical staff with store-front clinics manned by trained para-medical technicians. Already a practical 'interface' is developing between a member of the Telecommunications Center staff who has some training in biomedicine and the Audio-Visual Department of one of the hospitals.

-- The Police Department has been working with the Community College to develop a new two-year police science curriculum. They have decided to make a part of the curriculum into a television-and-radio series, both for the benefit of young police recruits who are training on-the-job, and also as a means of promoting police-community relations. They ask the Center to help select program units from the curriculum which will make good programing. In the process of working out the series, the Police Department gets several new ideas on how to use the telecommunications more effectively in the day-to-day operations of the department and begins to plan actively for their use.

-- A consortium of educators from public schools and local universities organizes to experiment with courses offered outside formal classes. Subject matter ranges from high school equivalency to graduate-level credit courses, and includes general enrichment. Originally, the courses were designed to be offered over the local ETV station, but the consortium is now considering the feasibility of delivery in several different modes, wherever possible with simulitions productions. Courses could be
broadcast live over educational television to the home, with a viewer response capability by return telephone;

or transmitted over ITFS to neighborhood learning centers with an audio return feedback;

or packaged into video cartridges as an individualized, programmed instruction course with branching capability and self-testing exercising built in;

or administered through a CAI terminal located in the home, the learning center or the library, linking the learner to the computer through a time-shared cable channel.

All of these examples are, of course, well within the present technology. We will look at the more distant future a little later.

The task of serving the varied needs of the community will involve many kinds of expertise. Of course, Telecommunications Center people will have to understand media so as to be able to help locate the best existing materials to do the job. If there are none -- or there is a particular need for locally-produced materials -- the Center should be able to help with the practical decisions about which medium is appropriate, what is a realistic budget, and what resources are required.

One of the main reasons for the creation of a Center will be to help combine and coordinate community resources wherever practicable. For example, a program on local facilities for care of the elderly might be jointly produced by a medical center, a group of nursing homes and the Red Cross chapter. A telecommunications job reference center could be sponsored cooperatively by the local Chamber of Commerce and the State Employment Commission. Neighborhood child care centers might enter into an agreement with a local
graduate child-development-center to produce new learning materials of all kinds, from simple graphics to computerized instruction to live video taped classroom "visits" to bicycle between child care centers -- or to broadcast and share with pre-schoolers at home.

What I'm trying to stress here is that one big job of a Telecommunications Center in a city is going to be to get people together to do the communicating jobs; educators and businessmen, police administrators and civic groups, a combination of public and private hospitals, a consortium of social agencies at federal, state, local and neighborhood levels.

This will become necessary because modern telecommunications cost money -- but not only because of the money. Also because of the increasing need for effective communications and public accountability. All too often we find today in the city that there are widely diffuse efforts going on among several public groups all working on the same problem with little or no effective coordination or communication between them. One of the main tasks of a Telecommunications Center, as I see it, is to help correct this wasteful situation and start "getting it all together." This is what is implied in the coordinating and integrating function of a communications "brain" in the city.

So far, I have been suggesting services for the Telecommunications Center which are still pretty close to home for us as
educational broadcasters. Most of the functions I have suggested that a Center might perform are still essentially characterized as radio-television in the service of education.

But now I want to take one more step into the future:

in June of this year, the National Academy of Engineering published a report on Communications Technology for Urban Improvement. In Chapter One, the report quotes Lewis Mumford as describing the city -- coldly -- as "primarily a machine for storing and processing information."

If we can, for a minute, take a long view of "telecommunications" and project ourselves into the city of the future, we may get a glimpse of another function which our Telecommunications Center might be performing in ten years or more from now.

First, transportation patterns in cities will be changed by communications technology. The "electronic highway" may largely replace the congested thoroughfares of today.

City dwellers may be working, going to school, holding conferences, shopping, paying bills, learning new employment skills, -- in short, communicating with each other -- by means of a sophisticated two-way-video urban communications system quite different from anything we know today.

This new communications system may also be the vehicle for electronic traffic control, for decentralized, electronically-
referenced "little city halls", for pollution sensors, police and fire protection services, electronic mail delivery, weather prediction, telemedical services and a myriad of public functions which are bound to influence the nature of urban life in some very significant ways.

We are already beginning to experience this "information revolution" and it is our business -- the communications business -- that has brought it about.

I don't need to tell you that some people see the spectre of Big Brother in this Wired City concept. Others more optimistically predict that we will finally achieve a working democracy based on a widely-informed and participating citizenry. I believe that the shape that we give to our Telecommunications Center in the next few years will have an impact on the direction in which our cities evolve. If these Centers are to continue to function as the coordinators of the future electronic culture, those of us here today are going to have to acquire some new skills which will equip us to understand these new technological advances and to use them effectively to accomplish our purposes.

One thing that we can say for sure: the more efficient the city's communications services become -- the more information that becomes available -- the more crucial becomes the question: what is important to know? And this has always been the province of education.
I haven't said much about the role of cultural programming this afternoon. Now I want to speak my last word about what I believe a Telecommunications Center will be doing in terms of art.

Often the complexity of the city, the sheer "too-much" ness of our urban life, boggles the mind. Specialists are forced to develop sub-specialities, and the knowledge that any one person can acquire in a lifetime seems at times to be hopelessly inadequate. While we surely are in the business of education, I think we need to remind ourselves that this doesn't mean simply adding to our intellectual store of knowledge. Sometimes information is so prolix that it can only be mediated by art ...

I hope that our Telecommunications Center will become a place of art as well as information. I think that if we, as educators and communicators, can make a place in the city where knowledge can be conveyed efficiently and effectively -- but with humanity and grace and humor, too -- we will have helped to build not only a brain for the city of the future, but perhaps a heart as well.

One aside:

Over the past two years, I have had many occasions to appear before local lawmakers and city boards, to speak for the public interest aspects of CATV. I always enjoy observing the councilmen's reaction to the suggestion that, with a public-oriented cable system, the meeting we are attending might be opened to the viewing public.
First: they smile.

Then: they begin to think of all the implications ...

As potential operators of the Telecommunications Center of the future, perhaps we can share their reaction.