

The Economic Club of New York

343rd Meeting
88th Year

John Malone
President and Chief Executive Officer
Telecommunications Inc. TCI

Marshall Loeb
Editor-at-Large *Fortune Magazine*

May 8, 1995

New York Hilton
New York City

Questioners: Robert Dilenschneider
Chairman of the Dilenschneider Group

David Hartman
President of Rodman-Downs

Introduction

Chairman Jack Hennessy

In the 88th year of The Economic Club of New York. I am Jack Hennessy, I am your new Chairman of the Economic Club and before anything else I would like to thank Don Marron the outgoing Chairman on behalf of the entire Board of Trustees. Unfortunately, Don couldn't be with us tonight, but I just wanted to say thank you to him for the last two years in which he has acted as a very active and able chairman.

Before we go to tonight's program, which is an especially interesting and exciting one, I wanted to inform you of one piece of late breaking news, Treasury Secretary Bob Rubin has just agreed to be our guest of honor and speaker at the Club dinner on Thursday June 1. So mark your calendars. You will receive an announcement shortly in the mail, but you ought to mark it down now.

Tonight's program is a double bill. We will have two speakers as you know. And the format is for me to introduce each one of them respectively. They will speak for 15 or 20 minutes each, and then after they finish we will have our normal procedure of having two predesignated questioners act on our behalf and cross-examine them a little bit.

It has almost become commonplace to say that the explosive change in telecommunications are

transforming today's world. Certainly in my own world of investment banking, it is a major part of what we do every day. What is less clear to all of us, is just how it is being transformed, where the changes are taking place, and what it is all going to mean to the rest of us. And that is what our program is about tonight. John Malone has been one of the driving forces behind the telecommunications revolution. Marshall Loeb is one of the nation's premier commentators on what is happening in the business world as a whole, and also a distinguished veteran of that old but familiar medium called print, as well as radio and television.

Our lead-off speaker will be John Malone. Dr. Malone has been President and Chief Executive of Telecommunications Inc., TCI, for more than 20 years, ever since 1973. Unlike most of us, he came into the business with a thorough grounding in technology. He took his Bachelor's Degree at Yale University in Electrical Engineering and Economics. Then won Master's Degrees in Electrical Engineering at NYU and Industrial Management at John's Hopkins and went on to a doctorate at John's Hopkins. He began his career in that legendary fount of futuristic invention, the Bell Labs. Then worked for McKinsey and General Instrument Corporations before joining TCI. One of the true visionaries of the cable industry. He built TCI into a cable powerhouse. The biggest cable operator in the country. And now he is building it into a multimedia powerhouse, entering a dizzying series of alliances as he moves ever further into programming, interactive services and practically every frontier of the expanding telecommunications universe. But we will let him tell his own story. John Malone....(Applause)

The Honorable John Malone

President and Chief Executive Office

Telecommunications Inc. TCI

Well thank you very much, it is an enormous honor to be given the opportunity to speak to this group. Looking at the list of predecessors is really intimidating. This week being the 50th anniversary of V-day it is kind of an appropriate thing to remember an old song. It said, we won't know where we are going till we get there. And I think that is kind of what this rapidly changing information age, technology is all about. Anybody who thinks they know where things are headed must be gravely confused, because I don't think anybody knows where this is going.

What we have is a technological breakthrough. Basically once video pictures became digital signals and the techniques of compressing them were well understood, the difference between various forms of information eroded and a digital telephone call, a digital video picture, a digital communication between personal computers all began to look alike. And industry distinctions based on technology start to disappear and generally that has been called convergence, I think, in the communications industry. My problem, my job at TCI, of course, is to try and navigate our little company through all of these uncharted waters and build a business, compete with industry giants, expand where the opportunities present themselves.

I think the first thing to look at is the global perspective. Pretty much, this is a worldwide

phenomenon. In countries that have advanced communications infrastructures, i.e. have well deployed 19th and 20th century technology in communications. This new technology creates an opportunity for the first time to offer competition in the distribution of information. Old, hundred year old telephone systems, which have been state monopolies because of essentially the economic realities, now look like they can face competition that could be cost-effective. Countries with no communication infrastructure or obsolete information infrastructures, suddenly look like they can leapfrog from 19th century to 21st century information technology. And in fact, countries as diverse as Poland or Japan are in fact aggressively studying the possibility of deploying what we call digital fiber hybrid coax systems, which would in fact allow for very low costs communication technology, universal availability of telephony and broadband interconnection of businesses, institutions and residences in a cost-effective way, without breaking the bank in terms of capital.

So it is quite an interesting turning point. Countries such as Japan, Germany, France and the UK are, or have looked at and are moving in the direction of encouraging competition for their domestic telephony businesses. Some of them have cable TV, some of them don't. Most of them view cable TV as an appropriate vehicle, the most likely vehicle to provide a competitive environment for communications. As George Gilder and some others have pointed out lately, we are moving from a condition of spectrum scarcity, which require monopolies and government regulation, to a super abundance of alternative delivery systems and all that implies.

Perhaps one of the most disappointing things is that in our own domestic front, regulation is being used to slow down this process rather than accelerate it. Despite the fact that these technologies have been pioneered here in America, we seem to be lagging in terms of their implementation. Largely because of regulatory restrictions on the deployment and the cross entry of industries.

It is a classic Catch-22 situation. The leaders of the government implore the private sector to accelerate its efforts to create a national information infrastructure at precisely the same time the government continues to implement policies that create maximum possible uncertainty for the private sector. Now hopefully this situation will clear up. There are Bills in Congress right now that look like they might give us some long-term direction here in the US.

The cable industry currently is the prime victim. At a time when the government should be encouraging private investment and digital broadband networks, the FCC through regulatory micro-management of the cable industry has dampened cash flows and created sufficient uncertainty in the marketplace to cut-off or restrict necessary investment capital. Thanks to those efforts of the FCC the cable industry experienced an actual decline in cash flow for the first and only time in its history in the second half of 1994. The prolonged congressional battle over telecommunications deregulation is another case in point. Essentially what is holding things up is an attempt to craft legislation that protects old monopolies from the effects of new competition. That is completely the wrong model. Attempts to hold harmless any company that seeks to be a

player in this emerging industry will fail.

Now the question is, what does a company like TCI do in this environment? There are really five principles that we've kind of adopted in this regard. The first is, of course, to try and provide the best customer service, the most cost-effective service we can to our customers domestically. The second is to try and fund those expanded services incrementally. To build an economic model that in fact is self funding, proportionate to the results. The third is to focus on deregulated markets. Those in which we have reasonable predictability. The fourth is to develop strong brand identity in the products and services that we distribute. And fifth is to form strategic alliances, both domestically and abroad that we can utilize in projecting and achieving our goals. These principles at the moment are serving us quite well.

Now in TCI, domestically we are now serving about 30% of the US public with our plant in place. That is the biggest footprint really of any communications company, probably two and a half times as large as the largest RBOC, Regional Bell Operating Company. So we do have a fairly large economic footprint.

We have decided to focus our company into its four component pieces; domestic communications, programming, international activities, and technology. And we have really created four separate focused groups and we intend to give each one of those businesses its own equity, its own realization. So that it can access the capital markets, tell its story and focus its

management on each piece of its business. In the international area, we have been very successful in bringing cable and telephony to the United Kingdom. The United Kingdom has a very, I would say a model deregulatory theory in which it permits anyone to serve both cable and telephony and we have been quite successful in raising capital in the UK and going ahead and deploying service. At this point we are actually doing better in telephony than we are in entertainment cable. So it is really quite a successful deployment and it is a state of the art system, perhaps the most advanced in the world at the present time.

Quite interestingly, that is a joint venture between our company and US West, a US RBOC, so we are both over there learning the rules of how we will compete if, as and when we are allowed to compete domestically.

Our programming unit, Liberty Media really is a broad potpourri of programming interests owned and controlled, and includes such things as the Turner Network, CNN, and Turner Broadcasting, Discovery Channel, The Learning Channel, Prime Sports, QVC, Home Shopping Network, Request Television. In all, 55 individual cable networks that are distributed broadly within the US and beginning to be distributed internationally. In addition, we distribute our programming by satellite. Our programming is found on both the Hughes DirecTV System, as well as PrimeStar which are two competing DirecTV systems. And I might point out, one of the first fruits of this digital revolution is in the satellite side where both our unit and the Hughes unit are using digital compression, digital television to provide greatly expanded television offering

on a cost-effective basis to the country. This is in direct competition with cable TV where cable exists and it is providing a supplementary service in markets where cable TV does not exist. So it is really one of the first fruits of this digital revolution. And I think that is an important question. There has been so much hype about information infrastructure, information super highway, you know, people are going to get worn out and say, well where is it, it hasn't happened yet, I am sort of going to start to forget about it.

Well the reality is, things really are happening. There really are major improvements being made. If you are a business customer of the telecommunications industry, what you found is the availability of alternatives is growing rapidly and the price you have to pay for communication services is declining fairly rapidly right now.

We have announced recently a joint venture with Kleiner Perkins which is a big investment, venture capital firm on the west coast to offer what is called an asymmetrical broad-band personal computer interconnect, 10 megabyte. Now this is all mumbo jumbo but what it really is, is a computer interconnect service that allows a high quality picture to show up on your personal computer screen in about a third of a second as opposed to four or five minutes if you download one from the Internet today. Dramatic change. You can also get video, full video, and so on. What it does is it will unlock the power of the multimedia PC that is rapidly gaining acceptance in American households.

This service, we believe, will be deployed beginning at the end of the year. We think it will be quite affordable. There will be nothing like it, and nothing likely to be like it, for a number of years. This is something that the telephone companies quite simply do not have the plant to provide and we are looking forward to that as one of the first true information age services to deploy nationally.

Another and perhaps cuter service that we have deployed recently and it is gaining broad acceptance is the SEGA Channel. This is in effect an opportunity for people to play interactive video games both against their machine as well as against any competitor anywhere in the world. It is a network game play system. It is enormously popular with those people who have taken it. It is being deployed fairly rapidly on a national basis. This is another fruit of the labor. It is the tip of the iceberg because interactive game play, games of skill for prizes and rewards, for recognition, is a technology and a service that I believe will explode on the American scene, perhaps worldwide. It has immense educational opportunities as well as just a neat way to spend an afternoon. The idea that we can deploy Mortal Kombat VI on Sunday afternoon at 3:00 and the first child anywhere in the world who kills the last dragon wins a college scholarship and shows up on international television...real big. Trust me. (Laughter) One of these video games, \$60 million in sales in one weekend. I mean this is big, this is very big and it is worldwide.

I think that, that is one of the important things to reflect on. When it comes to communications entertainment digital programming, this is a worldwide gain. When Microsoft Network deploys

in August, with the launch of Windows 95, it will be deployed worldwide. There are 140 million PC's out there, that use Microsoft Operating System. Embedded in Windows 95 will be the Microsoft Network infrastructure. It becomes a worldwide, very large scale gain, virtually overnight.

I guess one could say, well what is this mean for America, for our infrastructure, for how we do business and so on? Well, one very simple area of impact will be education. These technologies will make education a cumulative process. There is no reason why every teacher entering every classroom, every fall, has to reinvent the wheel. The process of education, of learning what works, of how to interact with a student is something that is very amenable to machine capture, to interactivity between the child and the machine and kids are much more interested in a game environment for learning, an interactive game environment, either one on the machine, or three kids playing against the machine, or playing against each other, than they are trying to understand what a teacher is trying to tell them in the class. I think this will be a major breakthrough in education. And a lot of resources in this country are already being dedicated to taking these multimedia technologies and dedicating them to cumulative learning process. Both for K-12, college and continuing education, distance learning is going to be very big.

Obviously you have all heard the stories, you know, telecommuting, we are all going to work out of our homes, we are going to move information to people, instead of people to information. That will affect the congestion on the roads and affect the airlines and affect everybody else.

Now who really knows how fast these technologies will take affect.

We know that we are starting to operate our company on a telecommuting basis. We are starting to have our customer service reps work out of their homes if they elect, much easier to move the information to them. It also broadens out the workforce. We can employ people who are single mothers and have kids at home, or who are handicapped, very effectively in this kind of an infrastructure. So it is really working distance medicine, you know everybody has talked about that.

I think the message I want to get across is what is really happening here is these technologies are bringing down the cost of communications and brining up the capacity of communications. And the net result is, this is a tool, it is a tool that will be used by industrial societies to improve the way they conduct their businesses and there will be virtually no element of our civilized world that is not touched by these technologies. Where productivity, efficiency, and interpersonal communication skills can all be enhanced as these become deployed.

And finally, I want to say that our theory of the world is deregulate everything, pick a point in time, have anti-trust protections against absolute problems in terms of concentration of power, but eliminate all barriers to entry and eliminate all government efforts to regulate technology. Because as an example, we were moving rapidly toward high definition TV in this country, a technology that digital really works well for, until the FCC decided to regulate it and establish

some standards. I think that was seven or eight years ago. We still don't have any high definition TV and I don't think we have any near-term prospects of having any high definition TV.

Meanwhile the Internet and the PC world goes on rapidly because the government hasn't figured out yet how to regulate their technology. And as a result you have marketplace phenomenon working and driving that particular part of the communications world.

That is basically the message. We are headed toward a more competitive environment in communications, lower costs, greater service availability. It is going to be a real scramble. It is what the free marketplace ought to be, survival of the fittest and at least for our guys, we all think we can prevail quite nicely in that environment. Thank you very much. (Applause)

Chairman Jack Hennessy: Thanks John for that fascinating look at the future. I was struck in listening to what you said about US West, and the UK, when I was working there ten years ago they had only three television channels and the big news was, should they have a fourth, and they were going to inaugurate something called Breakfast TV which couldn't work because no one turned on their TV's before 9:00 or 10:00 in the morning. Now they have 65 and that was Margaret Thatcher's philosophy of let's deregulate this and let's privatize telephones, let's just open it up to full competition, and in ten years they have leapfrogged way, way ahead. And I hadn't realized it you had a big part of the telephone business as well.

Our next speaker is no stranger here, at the Economic Club. In fact he is a member of our Board

of Trustees. But more importantly, Marshall Loeb has been a top editor of *Time* for more than 30 years. At *Time Magazine* he was business editor, economics editor, senior editor, columnist and he created the Magazine's Energy and Economy Sections. He chaired his board of economists and he went on to become the Editor of *Money Magazine* and then of Time Inc's Magazine Development Group before being chosen in 1986 as the top Editor of *Fortune*. And it was just last year that he retired from that post to become the magazine's very busy Editor-at-Large. While many of us know him from his *Fortune* days, others also know him better as the author of *Marshall Loeb's Money Guide*. There was a little bit of competition in the investment banking business there Marshall. But he has published this annually since 1983. He has also been a daily commentator on business and finance with CBS Radio Network, and a frequent television host and commentator. He has been Past-President of the American Society of Magazine Editors and he has won every major award for business and financial journalists. So it is a special pleasure for me to present to you one of the living legends of business journalism, Marshall Loeb.

(Applause)

The Honorable Marshall Loeb

Editor-at-Large *Fortune Magazine*

Thank you Jack. How can I possibly live up to that, thank you. I am so deeply honored that you invited me to speak at the Economic Club of New York and I am delighted to see so many long-time friends. I always worry about public address systems in these large rooms, so if you can't

hear me in the rear, just raise your hand as I go along and I will project more. I am particularly pleased to address a topic so close to my heart, competition and survival in the rapidly changing information age.

Let me share with you a couple of recent personal experiences that may tell something about the reach and the scope and the power of the new information technology. Two and a half weeks ago I was in the Minneapolis office of the Chief Executive of Honeywell, Michael Bonsignore, and he was as happy as the proverbial boy with a new toy. His company had just reported very strong first quarter earnings and Mike Bonsignore just picked up the phone and delivered a personal message of thanks and congratulations to 22,000 Honeywell employees all around the globe. With one voice message, he instantly and quite personally reached out and spoke with 22,000 associates. By now you may regard this sort of thing as commonplace, I think it is wondrous.

Another experience, a few days later I was in the Park Avenue office of a friend, Joe Danowsky who is a lawyer at Bear Stearns. Joe is blind, but that presents no insuperable problem in his work. He simply takes every legal brief he needs, he cuts out the pages of every law book that he uses and he feeds those sheets into an electronic scanner. Then he presses a few keys on his computer, and instantly all of the pages are read aloud to him, in synthesized speech that sounds uncannily human. You want to hear another voice, Marshall, no problem, press another key, you get another voice. You want it higher pitched, lower pitched, you want it read faster, just press some more keys. But printed word becomes the spoken word of your choice, thanks to the

scanner, and the computer and the mind is enabled to work.

These are just two of the millions of every day miracles that we are experiencing in the rapidly changing information age. And as Dr. Malone indicated, there will be more, many more. Let me give you just a few figures to show how fast the information age is really coming upon us. One-third of all American families now have personal computers in their homes. This year, for the first time, the money spent on PC's will exceed the money spent on TV sets. The U.S. dominates this most dynamic business. Bill Gates says that of the world's ten leading software companies, all ten are based in the U.S. Of the 55 computer related companies that have sales of \$1 billion or more, 41 are U.S. based. And if all that doesn't impress you, I will add this, Warren Buffet uses his home PC to play bridge online with partners in New York, California, and Washington State.

I have two themes tonight. The first theme is, use the new information technology or lose out to it. Companies that continuously seize upon the best of this fast evolving technology will gain a significant competitive edge over those that do not. Understanding and pursuing the new opportunities is not a responsibility that high executives can simply delegate to their technical specialists. The most successful managers I meet have hands on every day working knowledge of computers and are always patrolling and pressing the frontiers. A business chief who tries to lead his company into the new information age without experiencing the technology himself, is like a celibate giving sex instruction. (Laughter)

The second theme is, it is quite possible that we are right now in mid-1995, in the midst of a significant turning point in the information age. The pivotal event to my mind is that in large part the information highway has arrived and it is called the Internet. The Internet, the vast burgeoning web of corporate research and educational computer networks, 25,000 interlinked networks that span the globe. Networks where people and companies can communicate with each other. Where you can get information from all over the world. You commonly plug into the net through your own computer network at the office or by subscribing to one of the familiar online services. Traffic on the Internet doubles every year and it is rapidly growing much more important as a medium to advertise, and to sell goods to the consumer.

Now just a few more particulars about the net and here let me give credit for much of this information to my colleague Bruce Judson, General Manager of Time Incorporated New Media. More than 30 million people in over 160 countries now have access to the Internet and the total is expanding fast. Just one of those little signs. A Barnes and Noble store a few blocks from here has 350 book titles on the Internet and related subjects. They fill 15 shelves. Many companies are already using the net to communicate within the company or with other companies, or with consumers; to name just a few, General Electric, IBM, JP Morgan, Merrill Lynch, Motorola, Schlumberger, Xerox, the list goes on and on.

If you are on the fast expanding part of the Internet called the World Wide Web, you not only can send texts to all of the other users, but you can also provide them with four-color photos,

video clips and graphics at very little cost. So a lot of products and services are being displayed on the web. The huge question, still unanswered, is how to make serious money from all of this awesome activity and who will make it and when. Marketers are just beginning to see that this has the potential to become a significant medium to reach the consumer. Anyone with content, whether the content is news and information or goods and services to sell from the yellow pages to movies, can easily make it available on the Internet. Some companies are starting to charge fees for the news and entertainment that they have put up on the net, and more will surely follow, soon. Security is being enhanced so we can safely use our credit cards to order goods on the net. This has tremendous implications for retailers, for the \$60 billion catalog business, for other direct mail companies and a host of others. They can reach many millions of people who have sorted themselves into interest groups from fisherman to auto repair hobbyists. But this is not such terrific news for the postal service, to name just one, whose business to business mail has plunged 33% since 1988 and stands to drop still more because of competition from electronic mail on the Internet.

Advertising on this new medium is just now beginning and it is different. The users of the Internet and other online services select the ads they want, they can talk back and ask questions online to get more specific information. The advertiser commits to answer the questions and that takes considerable time and effort. But the advertiser has a rare opportunity to tailor a message precisely to the individual customer to give him or her or them a message precisely tailored to their wants and needs and to enter into a genuine dialogue with the customer.

Because this advertising is still in its infancy, it is remarkably inexpensive for now. So it probably pays for companies to test it out and experiment with it. And the same holds true for advertising agencies. Ray Smith, Chairman of Bell Atlantic tells agency people, “You can jump in early and help create this exciting medium or you can let the world pass you by and find yourself operating the best darn buggy whip business on Madison Avenue”.

Still another important development ahead, as Dr. Malone said, keep your eye out for Windows 95, that upgraded computer operating system that Microsoft plans to launch this August. Our computer experts who have seen it, say that it is quite a step forward and may give the PC manufacturers who use it a further edge over Apple.

At the same time Microsoft will also be introducing its own online service. As you know, the Microsoft Network. It will part of Windows 95 and its goal is to blow right by the other online services. Notably America Online, Compuserve and Prodigy. If you have Windows 95 just click a button and you will be on the Microsoft Network and by the end of this year, click another button and you will be on the Internet. So Windows 95 may lead to a further dramatic jump in the number of people online around the world.

Now among the major gainers may well be publishers, including publishers of magazines. Already you can call up stories from many of our Time Inc. Magazines with our new Pathfinder service on the Internet. Though it is only a few months old, Pathfinder attracts more than 4

million requests for information every week and it has quickly become the busiest content based site on the Internet. Even our own people have been surprised by this outpouring. The large number of requests also suggests that well-known trusted brand-names will be very valuable on the Internet because after all the titles that we are marketing on the net, *Times*, *Sports Illustrated*, *People*, *Money*, *Entertainment Weekly*, *The Fortune 500* are all familiar brand-names. In addition, you can get the full text of the following week's *Time Magazine* on American Online every Sunday at 4:00 PM. Yes, there is also a time daily with updated news reports throughout the day on Pathfinder and America Online. As you know, Time Warner is making a test of interactive television in its Orlando Cable system. Several dozen households are now linked into this experimental full-service network and the company expects the total to reach 4,000 households by this year's end. It offers movies on demand, video games, and interactive home shopping. And there is a set top Hewlett Packard printer that produces four-color ads and recipes and soon, will print out news reports. The test has shown that the interactive technology works, though it has been slower to develop and costlier than originally hoped.

What is happening now then is largely a marketing test to see what consumers want and how much they will be willing to pay. We really know very little about what will drive this interactive network. What the viewers and the users will really want, we guess, it will be movies and video and games above all, followed by news about your own special interest, but we may well be surprised. Given my own biases, I believe there will be an intense demand for personal financial advice, tailored just for you. Indeed, on all of the interactive media, I believe there will be a

significant increase in demand for business news and analysis. You will be able to call up, not only the day's stories, but also background that is both in-depth and tailored to your needs and wishes. For example, company reports and positions on issues, business leader's biographies, and speeches, available at any time. The users of the new media will not be passive readers accepting just what is presented to them, but they will be active customers demanding and getting the nuance information they want. In this new information age, content will be king and those people who know how to create or acquire a process content will find themselves in high demand and will do very well indeed. Their value in the marketplace will increase. Already the race is on for rights to content for stuff, for the text that has been printed in magazines and newspapers and books. For the pictures that preside in photo libraries, for movies, for the artwork from museums, for the text and graphics from encyclopedia and much more.

Partly to acquire this content, though, there will be global deals galore among telephone, cable, computer, entertainment and other companies. Many of these alliances will be surprising, competitors will become allies on some deals, allies will become bitter competitors on other deals. The cable companies want to break into the phone business and vice versa. The cable folks argue persuasively that it is a lot easier and cheaper for them to add voice on their capacious cables than for the phone companies to add video to their wires.

The rise of interactive information on screens, raises questions about the future of print. Is print dead? No, of course not. We will always have newspapers and magazines and the ones that serve

their customers best will flourish. After all magazines are hard to beat for portability, convenience, and price. And Warren Buffet will tell you that there are few surer ways to make pots of money than to own a monopoly newspaper. But those of us in the news media have to realize that we are not in the magazine business or the newspaper business or the television business, we are in the information business. The enterprise of gathering, interpreting, and communicating information. As a journalist I am much less interested in the medium than the message. And if I can get my message out, not only in the pages of a magazine, but also on the screens, on the Internet, and by means of broadcast and set top printouts on the full service network, that expands my productivity, enlarges my audience, enhances my sense of accomplishment, and not so incidentally probably will increase my income.

So the journalist future lies not in the printed word but in the word. The word delivered by any and every means. I have no special allegiance to the printing industry or the postal service. If an editor can press a key to close his or her magazine at one minute to midnight on Saturday and at one minute after midnight on Sunday, you get access to the entire magazine on your screen, or parts of it tailored just for you on your set top printer, I think that is grand. The technology has just vastly increased the editor's speed and effectiveness, cutting down the time between his or her closing the publication and you receiving it. Cutting down the time from two days or perhaps two weeks to two minutes or maybe instantaneously.

The new information era will bring many problems. Some of them barely imagined today. But

they will be issues, not only of economics and technology which are daunting enough, but also political, societal, cultural even moral problems. One problem out there on the global horizon is this, governments in many countries, notably in the Third World are in no mood to let their people get access to complete and unrestricted information. We have already seen Rupert Murdoch throw the BBC World News off his network in Asia in order to appease the Chinese, who did not quite adore all of the news that the BBE was broadcasting. And in Singapore which closely controls the press, and where you can't even walk down the street and chew gum at the same time, without facing a walloping fine, the political leaders are not amused that citizens will be able to call up almost anything on their interactive TV and computer screens.

One quote from the permanent secretary of Singapore's foreign office, "The assumption in our part of the world is that the unrestricted, unhampered flow of information can be disruptive". Negotiating with foreign authorities over just what news and analysis and entertainment we can and cannot get into their countries to determining just if, and when, and where and why we make compromises, all these take us into waters we have never before traversed. And will require us to have a sensitivity to the histories, the politics and the cultures of various countries, not to mention a solid grounding in ethics. My own guess is that countries in the Third World will continue to impose restrictions on the information that we can transmit. And while we will make some dents, we will have to learn to live within many of those limits. Most of those countries and others have nothing like the heritage of press freedom that we cherish and they surely have nothing like our unique and precious First Amendment.

The new information media showed tremendous potential as teaching tools. But the challenge is to make them as readily available to the poor as to the affluent. The affluent child is surrounded at home by computers and by parents eager and able to help teach him or her, but not so the deprived child of the central city. Schools in affluent suburbs have twice as many computers per student as city schools do. (CHANGED AUDIO SIDE)the schools, the PC's that we discard when our companies upgrade their computers. The profound irony is that the interactive modern media can become the great teacher and unifier, but unless we find means to spread their mastery among the bulk of the world's population, then the modern media will become the great divider and we will face a situation of information apartheid.

In the 90's and beyond, knowledge will be power. Knowledge will be power. The new currency is knowledge. Unless we find means to bring knowledge to the deprived, then the gap between rich and poor, majority and minority, will grow ever dangerously wider. We cannot long prosper as a nation, part information rich, and part information poor. The greatest challenge facing us in the new information era and the greatest opportunity is to find means to deliver the new media, not only to the affluent and the spreading middle classes but also to the world's poor as well.

Thank you very much. (Applause)

QUESTION AND ANSWER PERIOD

CHAIRMAN JACK HENNESSY: Well I can't think of two better presentations than those. Let

me introduce now, our two questioners as the program noted, we were expecting Ed Meyer of Grey Advertising, but he has had to travel unexpectedly over the weekend, so Bob Dilenschneider, Chairman of the Dilenschneider Group will be questioner number one, and also we will have David Hartman, who will be well-known to all of us as the host of Good Morning America many years ago, and now the President of Rodman-Downs, very well known, documentary television company. Bob will you lead off with the first question and then we will alternate between you and David.

ROBERT DILENSCHNEIDER: Thank you Jack. I would like to ask Mr. Malone a question. Mr. Malone you have been called the most powerful man in television. It is rumored that you are part of every broadcast or Internet deal that is being discussed these days. What is your next move, what do you personally want, and what is your vision for the American people in terms of the content you are going to put in the cyberspace you described today?

THE HONORABLE JOHN MALONE: Well of course I have been called a lot of things, that is one of the best. (Laughter) I think one of the wonderful things about the technologies of abundance, which is what I think these are, is that it really provides fraud opportunities for people to pursue their own individual interests. When fully deployed, these kind of—let's call it an expanded Internet model—where anybody anywhere, at any time, can access anything, anywhere. It allows people to pursue their individual interests, to form affinity groups that could be very small. I think one of the most compelling things that Marshall didn't mention, is that the

principle use so far of the Internet has been for interpersonal communication; chat groups, hobby groups, bulletin boards, small communities of interest. So while this is a technology that one might think separates people, the reality is, it has become a technology that does unite people. And I think as the technologies get better, the speeds get faster and the costs come down, I think we can look forward to this really enhancing interpersonal communication and the ability of people to pursue their own interests, whether it is a student at a rural school able to take advanced college training, which otherwise wouldn't be provided, or the inner city school child that can have remedial education for his dyslexia with the highest technology and the best skills possible on Earth. Those are the kinds of things that I think can be developed. It is not just more reruns of Good Morning America. I think it is in fact, really I think as broad and as fertile as human imagination can make it. And I think the goal here has got to be to make sure that it is open access, available to everybody. I might say, to put a commercial in, you know, we have probably led the charge. We have wired every school in every community that we serve, over 18,000 schools and we currently have computer training facilities where we train 3,000 public school teachers in these technologies each year. So we have made a big commitment to try and drive this into the schools, particularly the inner city schools where they need it most desperately.

DAVID HARTMAN: Dr. Malone, I will just followup on that, so you guys don't have to keep jumping up and down. To continue on with the idea that Marshall just mentioned about content, and to take you back to your core business of television for just a moment, and the fact that your

systems carry every television program I guess that are on America. While there is so much of television that is excellent, there is a great concern, and more and more it seems every day, about the amount of vulgar, and exploitive, and violent and provocative programming in one form or another that is on television. And the television increasingly may be becoming part of problems socially and to a lesser extent perhaps solutions in some way. How much responsibility do you and the other top executives in the industry, whether it be the networks, the other cable operations, Time Warner, Turner, etc., how much personal responsibility do each of you have for the content that is presented on television and to what extent should you all be in some way accountable for the content of programming.

THE HONORABLE JOHN MALONE: Of course that is a very tough one, because this is a country that abhors censorship I think in the strongest terms. The approach that we have taken historically to it is from an investment point of view. We invest in things that we believe are socially responsible in terms of the creation of programming; Discovery Channel, Learning Channel, Black Entertainment Television, programming services that we can look in the mirror and feel good about. So we first of all, as equity investors, do not invest in stuff that we don't believe in. Second of all, as a distributor, while we cannot be censors, and in fact, any efforts that we have made over the years to censor individual networks have not been able to be successfully implemented. We either have to carry the network in its entirety or not. We cannot get into individual program content. What we do insist on is any programming that doesn't meet reasonable community standards be scrambled and only be available to those households who

specifically want it. The third thing we can do is provide advisory services and control equipment so that families can censor their own programming. I think this is going to be a very important ingredient in the Internet is the ability for parents to have some way of screening the program, the information providers, the IP's is the lexicon of the business, so that their children will only have access to IP's that meet some kind of a code or standard or other service. In fact there is probably a very good service business of publishing guides to the Internet with ratings for instance. But I don't believe we can be censors. I think at most we can decline to invest in things that are against the societal interest and at best provide the tools for parents to supervise the viewing and other activities of their children.

DAVID HARTMAN: At the same time, how concerned are you, just as, not only as an executive in the industry, but as an American person who gets up and goes to work every day as a family person and so forth about the thing I am talking about, which concerns many if not most people in the country. And if not you, I am not suggesting you should be a censor, and I don't think anybody would suggest that, but if it can't be done by you in your chair, where are the solutions, if the problem is as great as many people perceive it to be?

THE HONORABLE JOHN MALONE: Well I for one do believe that constant exposure to irrational violence without displaying the consequences you know is very harmful to the society and on a cumulative basis it is a deadening kind of a phenomenon that we have got going. People are fascinated in this society by seeing, witnessing violence. So it is a serious problem. I think it

is a very serious problem. You know as far as our society let's me go, is to try and push programming that doesn't contain that, but if you are trying to for instance program a subscription movie service, with the output of Hollywood, try and do it without showing gratuitous violence. It is very difficult because our society is totally fascinated right now with that subject. And I really don't have the answer. I think that is more social and political philosophy than technology. You tell me what to do and I will figure out how to do it. But in terms of how to cut that fine balance between the interests of an open society and the need to protect people from themselves, it is a tough political question.

BOB DISENSCHEIDER: Marshall, you are clearly the top business journalist of our time, let me take a step back from cyberspace and ask a question that I think is on the minds of business people across this country. And you are ideally suited given your background to answer it. I find that more and more business people feel they are being treated unfairly by a hostile press. Many actually fear the media, what it can do to their companies, their careers, market capitalization they have worked so hard to build up. Would you just comment on this trend which is definitely growing out there and offer business people generally whatever advice you might have for dealing with the media?

THE HONORABLE MARSHALL LOEB: Well I have been on the receiving end of some of that myself from time to time, as I think a number of editors have been. And I do not dispute what you say. The odd thing, or the anomaly is I think that business journalism is significantly better

today than it was just a few years ago. We have an excellent national newspaper, *The Wall Street Journal*. We have three major business magazines, the business pages of the daily newspapers out in the country, have I think improved greatly though. We can all criticize them. I think a key decision here is what do you do when your assistant says, Mike Wallace is waiting with a camera crew in the anteroom, or in the waiting room. My answer to that is almost invariably speak up. Do not try to be silent, do not dodge the press. Sometimes you will be treated in a fashion less well than you think you should have been treated. But my experience has been that in the vast majority of cases; executives, business people, serve themselves, their companies, their communities, their country, much better by speaking up, instead of evading. Don't listen to the lawyers. There are things that are worse than lawsuits. I think you can lose cases in the court of public opinion. Particularly when there is a question of crisis. I think it is very important that the Chief Executive Officer, come front and center and be the individual representative or spokesperson. We have the example, the unfortunate example of the Exxon Valdez and we can contrast that with the example of Johnson and Johnson and Tylenol. Where the Chief Executive was out there, not afraid to say, "I am sorry, we are sorry and we are going to get to the bottom of this". I think it is very important that you be proactive, that you get out and speak with journalists ahead of time. That you get to know journalists, no, not to violate the arms length relationship, but indeed call in an unhurried moment, find out the journalists who are covering your particular company or area. Say, do you wish to come to see me for 20 or 30 minutes, if not, may I come to see you? And just tell what you are trying to accomplish, what is on your mind, something about the company and so forth. I think that the journalist who has a background of

the company, just knows something more. I have to believe that while business journalism often fails, while mistakes are made, it is getting better and if you are proactive, and if you do speak up, you are going to come out better in the long run. One final note, when there is a crisis, when there is something awful or very negative that occurs, try to get all the news of it out as soon as possible. If you try to hold back, then others will surely get on to the news and will tell it in fashions that are not necessarily the way you see things. A one day story dribbles out and becomes a day after day after day after day story. Get it, get the full story, get the facts, get it right, get it out and get it behind you.

DAVID HARTMAN: Marshall, you mentioned, you used the words morality, morals and ethics earlier, back when we had only...before computers essentially as we know them now and what you gentlemen are talking about, and before we had anywhere from 40 to 100 channels of television and what we have now, when we only had three networks and a few local stations, and we had professionals in whom we could depend on who were experienced and wise and knowledgeable and they put something on the screen, essentially we could buy it, we could say we will buy that. Now, with so many channels, with so many venues, there seems to be a real question about whether or not there are going to be the kind of people, to use your word, the word, who can write the word, present the word, with credibility, with accuracy, that we can trust. How concerned are you that with this many venues between computers and television and so forth, that we won't know for sure the extent to which we can trust what we see and hear and believe it and buy it.

THE HONORABLE MARSHALL LOEB: Because we won't have enough in the way of credible analysts or well-trained people who broadcast...

DAVID HARTMAN: And we won't know necessarily where it is coming from. How much of a concern is that?

THE HONORABLE MARSHALL LOEB: I am less concerned than you seem to be in terms of the talent that is out there. I see so many in the way of young journalists, lots of them from the heartland and the south, not necessarily the two coasts, who are really eagerly looking for jobs with you know, great talents and abilities behind them. I do think that it is incumbent upon all of us to pass on training to these people and to give these people opportunities. I see that the Internet as you mentioned, is becoming very much a bottoms up type of operation instead of a top down operation and people are forming their own chat groups and so forth. So many entrepreneurs, recognize you are not talking about producers or commentators or journalists here, but so many entrepreneurs have come out in just the last 12 to 24 months to create businesses related to interactive media that one futurist calls the interactive media a full Employment Act for entrepreneurs. So I think we are really bringing forward a good number of those people. But I think there is more to your question and I haven't totally answered it.

DAVID HARTMAN: My question has to do with our knowing where the information is coming

from and being able to trust it. Whether it is journalistic material or material that is coming through the Internet from any one of a number of sources as you described and since we don't have a history of knowing where a lot of this information is coming from, because we hit a half a dozen buttons on the computer, how do we know we can trust it, that we are not being taken advantage of?

THE HONORABLE MARSHALL LOEB: I think that we, obviously have to do the best we can to find out the source and if the source is the mad bomber or something like that, which I hope is aberrational, then we probably treat it accordingly. But I have to believe that so much of the communication online is going to come from the major publishing and broadcasting companies at this moment. And we know the degree of trust or lack of trust that we can invest in them. I basically trust the news operations, say of the three networks. I may disagree with them. I may disagree on some occasions the way they play the news, but I essentially do trust them.

DAVID HARTMAN: But what you are saying is that most of the suppliers then are going to be the outfits we now know essentially and trust, and not the unknowns.

THE HONORABLE MARSHALL LOEB: My guess is that the big, the major, the all encompassing suppliers will be those and that they will coexist with lots of bottoms up people who will be servicing the fly fisherman's group or whatever group you may have. Much like you have small trade publications in America today.

BOB DILENSCHNEIDER: John Malone, let me ask you, Newt Gingrich last week called for a radical revision of telecommunication laws. He is looking for a new blueprint for the governing of telecommunications in this country. If I have heard you correctly, you are really saying that you want to operate in a deregulated environment where it is everybody for themselves. Do you think that is really possible given what is going on in the country today and recognizing that it might not be possible right away, what type of blueprint would you like to see governing telecommunications in this country in the future?

THE HONORABLE JOHN MALONE: Well we support what the House is talking about passing, the recent Bliley-Dingell-Fields Bill. We also support the Prester Bill in the Senate. It seems strange to support two things that are that much different. But, we support anything that moves in the direction of deregulating the business. But I think most important to us is to understand that the government should not try and regulate or dictate winners and losers in technology because all they can do is slow the process down and put America behind the eight ball when it comes to worldwide competitiveness. I think that is the most important ingredient. With respect to barriers to entry of various communications businesses, it would be our delight to say, pick a time certain a few years out, and phase out all barriers to entry at a date certain in the future and let everybody compete and let people enter each others businesses and have an essentially anti-trust supervision to make sure there aren't any severe abuses but let the marketplace actually work. We think that is the best remedy for driving the communications

business in this country and we suspect that would work quite well worldwide. Really, if you look at it, the only long-term function in a market economy that the FCC would have is the allocation of frequencies and making sure that people aren't abusing frequency allocations and that is probably a function that the forest service could handle. I mean since they have decided to auction frequencies off and let the marketplace dictate supply and demand, you know, that would seem to be a more capitalistic approach towards letting people use the scarce natural resources which over the air frequencies are. And for those who don't know, the first round of the PCS auctions, I believe raised something in the vicinity of \$8 billion for the Federal Treasury. Now, five or six years ago that would have raised a lot of money for some law firms and a bunch of lobbyists and nothing for the Treasury. So I think that is a great big stride in putting assets, public assets where the marketplace wants to give them the highest incremental value. But that would be my prescription for regulation.

BOB DILENSCHNEIDER: Let me just followup on the marketplace point. Sidney Sheldon who is a bestselling author has suggested that when the marketplace speaks on the issue of taste, that is exactly what happens and if taste goes down, well that is what the marketplace wants and that is what the marketplace should get. There are many other authors who feel differently about it. How do you feel from TCI's point of view. Do you feel the marketplace should regulate taste or should TCI take a role in taste and if so, what role would you want it to take?

THE HONORABLE JOHN MALONE: Well I frankly have a lot more faith in people's

commonsense. I think there is a lot more commonsense out in the country than is generally given credit. Particularly given credit by people who control power in either Washington or New York, and that given access to a broad range of information, the public is pretty sensible about it. And will in fact support things that are useful and informative and correct over time. But I don't really see any big difference between print. I suspect that when Gutenberg invented the printing press there was panic amongst established powers in communication. Yeah, the scribes probably panicked. There first of all was an entrenched power base and second of all governments everywhere worried about what are we going to do now that people have access to all of these radical ideas. I don't think the world changes that dramatically. It is just a big cycle. And we are just getting better at technology. So I think generally speaking we should not be censors. What we should do is make sure that everybody with something to say has an opportunity to be heard if there are enough people out there who are interested in hearing it. And our role as communications companies is allowing them to get together in a cost effective and timely way.

DAVID HARTMAN: As a non-techno whiz, would you please explain something briefly to me and if I hope somebody else out there doesn't understand it too. You said that you bid, right, on these franchise offerings by the Federal Government, what did you bid, what did you bid it for, and what did you get?

THE HONORABLE JOHN MALONE: What was auctioned off by the government was spectrum, the right to have license, the right to broadcast at certain frequencies in certain

markets. It is kind of like a broadcast license used to be, except in this case it is a consistent set of frequencies called personal communication service frequencies, okay. I won't get more technical than that. But, those frequencies are essentially transmitted by the air, like broadcast signals, but it is a frequency which currently is not used. So the government decided that these frequencies were appropriate for something like cellular service, except they call it personal communication service, because it requires less power to offer and therefore batteries and so on last longer. This is an entirely new area of telephone communications. The FCC after an Act of Congress set up a procedure to auction these off and what they did was they set up a set of procedures where each market was auctioned off. They broke the country into 52 markets. And then auctioned off, and there were two sets of licenses per market in the first round of bidding.

DAVID HARTMAN: And you got some of those right?

THE HONORABLE JOHN MALONE: The group that we are affiliated with Sprint and two other cable companies paid roughly \$14 per person in the US for licenses that cover about 82% of the US, enabling us to offer something like cellular service on a national basis, with one brand new technology. We think that is pretty revolutionary that these new services will be very dramatic.

DAVID HARTMAN: So you essentially wrote a check for that?

THE HONORABLE JOHN MALONE: We wrote a check as a group for \$2.7 billion for those licenses, yes. To the U.S. Treasury.

DAVID HARTMAN: What do you now, you and your partners in this Sprint and the other cable companies, are going to create some kind of a system to deliver service, right.

THE HONORABLE JOHN MALONE: Yes, think about cellular when it was first available. This is like a whole new type of cellular service, except it has certain advantages. It is all digital. It is secure, the batteries last longer, you know as a user it has a lot of nice features.

DAVID HARTMAN: How long will it take you to set up and what will it cost you to prepare this so that you can go out and sell this to our houses and say we want to buy your service?

THE HONORABLE JOHN MALONE: Well we will begin deployment of this service in two markets, southern California basically, and metropolitan Washington DC later this year. We would hope to have it in national service within a year to 18 months.

DAVID HARTMAN: And how much will it cost you?

THE HONORABLE JOHN MALONE: It really depends on what percentage of the population takes the service. The cost is largely incremental. I think in terms of our investment, it is

something like \$400 per active customer. Some fixed cost, but basically most of it is marginal cost, so much per customer.

DAVID HARTMAN: As fast as the technology is going, which you have talked about, or most people talk about how quickly it is all moving, how sure are you that this is going to be the next thing that will be around long enough for this to be profitable for you.

THE HONORABLE JOHN MALONE: Well if you do the arithmetic the average cellular bill right now is about \$80 a month, and if our investment per customer is \$400, it ain't that bad. (Laughter). There is risk to every business and that is a little facetious because the question is, can we amortize the \$2.7 billion we paid for the licenses in an economic model in which there are going to be five people competing for the mobile customer. That is really the question. Of course, from our point of view, these licenses also give us the ability to give you a replacement for regular telephone service with a wireless, what is called wireless connection; a service that isn't mobile, that is fixed to your home, but is wireless. So it is our way to be able to compete with Ray Smith who says he is going to blow us out of the water. We didn't have to buy them, in other words. (Laughter)

DAVID HARTMAN: You mentioned earlier about you wanted the whole business to be essentially deregulated, except for antitrust. If that happens, and I know, it is a big if, but if it happens, how many big giant conglomerate operations do you see providing these kind of

services, a couple, or a half dozen, or 20 or 50?

THE HONORABLE JOHN MALONE: Well are you talking the US or worldwide?

DAVID HARTMAN: US.

THE HONORABLE JOHN MALONE: Well first of all I think this business goes worldwide to answer the question.

DAVID HARTMAN: Okay, worldwide. (Laughter)

THE HONORABLE JOHN MALONE: Five or six. But they don't necessarily need to be monolithic, another words, just like Coca-Cola is a worldwide company, they have many bottlers who happen to own and operate districts. I think it is important that if you are going to be in this business that you have a worldwide brand and that you have a worldwide service offering and that you be connected on a worldwide basis. It is not necessarily that one corporation or one set of shareholders own everything. So there are many economic models, but I think brand will turn out to be so important in marketing services, products and services, that there won't be that many and they will be worldwide. Just like CNN now is in 254 countries. It is a strong positive brand. It is very hard to create another CNN. Because of the brand strength, but that doesn't mean that Turner owns the domestic news in Red China or pardon, PRC, or Taiwan.

DAVID HARTMAN: Is there any danger in your mind that with just, let's say five or six giant corporations like this, internationally, that there would be too much control, both economic and or control of the instruments of transmission of information and to some extent the content that it could become a problem?

THE HONORABLE JOHN MALONE: See, I see the world differently. I see the world coming from concentration of power. There used to be one AT&T. In Germany there is one Bundespost in Japan there is one NTT, in the US there used to be three networks. And in fact, for quite a while there were only two. And so what I see happening is actually a fractionalization of concentration of power. Okay, but instead of it dominating totally one country, it will go worldwide.

BOB DILENSCHNEIDER: Jack, let me ask one last question to Marshall and to John both. Whoever said it was correct, Murdoch did move to appease the Chinese recently. And yet the FCC has granted Murdoch some latitude in the United States. Now in a country like the United States that prizes the First Amendment, prizes free speech, should the FCC in your minds have taken into account what happened in another country, when it made its decision?

THE HONORABLE MARSHALL LOEB: Not in this particular instance. What I am very sensitive to something that both you and David raised and that is the responsibility of the press

and whose responsibility or authority is it for the content of television. I am very sensitive to criticisms of the press which I think as you say Bob have grown in magnitude, so no matter how hard we try, and yes I submit that business journalism is getting better, there is something wrong, and we just have to do much better than we are. And when it comes down to who has authority, who has responsibility for broadcast, I would argue that we all have. An editor makes decisions every day, and sometimes every hour or every minute in matters of judgment and taste and so forth and so on. I think that should be true of station managers and news managers and indeed owners of some of these broadcast outlets. We can all cite outrageous examples of things we would never allow on television or cable, and I just think it is the responsibility of all of us not excluding the advertiser to play a role in that. But I agree this is a very, very sensitive area in which sometimes there are very few firm rules.

THE HONORABLE JOHN MALONE: Well Rupert dumped the BBC and he also underwrote a very costly book deal with high party official's relatives. I mean, everybody wants into the China domestic market. Our view is, and you will see an announcement probably tomorrow that we have, we will be announcing a fairly broad reaching arrangement with CCTV which is Chinese Central Television to work with them on domestic programming. Our view of the world is, if you are going to be a meaningful programmer in a large country with a clear national identity you want to be inside the country programming the countries programming in accordance with its culture and working with its society, rather than trying to engage in pure cultural invasion which is almost always, gets people's hackles up. And it may be good from a purist point of view, but it

is not very useful when you are trying to develop broad business relationships in the country.

CHAIRMAN JACK HENNESSY: I think we can go on all night. This is fascinating, but regretfully we have to call an end to this, and I think you will all join me in thanking our two speakers tonight, Dr. John Malone and Marshall Loeb. (Applause) Also, thank you David Hartman and Bob Dilenschneider, for provocative questions. Please give them a hand as well. (Applause) Again, mark your calendars for June 1, Bob Rubin. I declare the meeting of the Economic Club closed.