UNIT 3 THE GLOBALIZATION OF COMMUNICATIONS: A GLOBAL VILLAGE

Structure

3.0 OBJECTIVES

This unit will help you to understand the following points

- the world is now a "global village",

- there has been an acceleration in communications in the last one hundred years. Changes in communication technologies have made globalization possible, and indeed inevitable, and

- every revolutionary change in communications technologies results in unprecedented social change.

3.1 INTRODUCTION

Have you ever though what it would be like if you had lived a hundred years ago? There would perhaps have been no electric light in your home or village or city; you would have used oil lamps. How would you travel? How would you get news of the world around you – how large would the world around you have been?

What technology has done for us is to "shrink" our world. We travel by air rather than by bullock-cart. We have the telephone, the radio, and television via satellite, allowing for instant communcation across the globe. We have e-mail and internet. A person who was magically transported from the early 20th century to the early 21st century would be puzzled and quite lost in our world!

In this unit we shall think about the technology that has changed our world, and abolut how it has done so. We shall see that in the past 150 years or so, technological changes have been much more rapid than at any time in the history of humankind. As our means of communication have changed, our communication needs have changed as well. We now need to communicate with people all across the world, whose language and culture may be quite different than our own. We can no longer remain "locked" within a society and culture that we know, or grew up in. We have

to meet news ways of living and seeing, and think of how best to integrate our lives into this larger world.

> Today, after more than a century of electric technology, we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned.
>
> – Marshall McLuhan, *Understanding Media*, 1964.

3.2   A GLOBAL VILLAGE

It was Marshall McLuhan who coined the term "the global village." McLuhan, who died on the last day of 1980 (on December 31), has been called "the most celebrated English teacher of the twentieth century". This Canadian was a professor of English literature, but he was also a communications theorist and philosopher.

What did he mean by "the global village?" McLuhan was referring to a communications explosion that was creating a "wired world". Our world is now interconnected by the instantaneous flow of information between any two points on the globe, however distant or remote. Events in one part of the world can be experienced from other parts as they happen, "in real-time". So our world of experience has the immediacy of life in a village – except that our "village" is now the entire world.

Stop for a moment and think.

❖   Have you ever watched a cricket match or a football game that was happening in some other part of the world, such as Australia, Germany or the West Indies, "live" (that is, as it was happening) on television?

Activity

Ask an older person in the house if they remember a time when they waited for the next day's newspaper to find out what had happened in a game abroad.

❖   Have you ever used a cell phone to speak to your friend or relative from another city, or from a train or an airport?

Activity

Ask the older people in your family if they remember a time when telephone calls were expensive and difficult to make, and people sent telegrams to say that they had arrived safely, or to inform you about some urgent news (usually, bad news!).

√   **Check Your Progress 1**

1.   Who was Marshall McLuhan? Why did he say the world is now a "global village"?

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3.3 AN ARDUOUS JOURNEY, JUST OVER A HUNDRED YEARS AGO...

For many of you, it may be difficult to imagine a time when a letter took three weeks to travel from India to Britain by sea. Indeed, if we go back to the late 19th century, we find that three weeks – twenty one days – were once required for a journey from "Trichinopoly" (now Tiruchirapalli or Tiruchi in Tamil Nadu) to "Vizagapatam" (now Vishakhapatnam in Andhra Pradesh)! In 1892, the grandfather of the astrophysicist S. Chandrashekhar performed just such a journey. (You may know that S. Chandrashekhar is the person who formulated the "Chandrashekhar limit" that led to the discovery of neutron stars and black holes. Chandrashekhar's uncle was Sir C.V. Raman.) Chandrashekhar's biographer, Kameshwar K. Wali, tells us:

> They first had to go out of their way to Guntakal in order to take the train to Bezwada (Vijayawada); then they traveled by construction train and canal boats to Rajahmundry. Finally they rode for four days in a cart pulled by bullocks to reach their destination.
>
> Kameshwar K. Wali (1990:42)

He then tells us: "At that time the railroads were just being built. The very next year, Chandra's father could join them in one day."

So you see how dramatically the railways have altered our world – although today we think of a journey by train as a slow way of travelling!

Activity

Find Tiruchi, Guntakal, Vijayawada, Rajamundry and Vishakhapatnam on a map of India. Find out the distances between these places.

Look for a road map and a rail map of India. Find out how these places are now connected. What route would you now take to go from Tiruchi to Vizag?

Is it possible to take a plane now from Tiruchi to Vizag? How long would a plane journey, a journey by road, and a journey by train take? Plan a journey from Tiruchi to Vizag, keeping in mind the time as well as the money you can afford to spend.

√   **Check Your Progress 2**

2.   How long did it take to travel from Tiruchi (Tamil Nadu) to Vijayawada (Andhra Pradesh) in 1892, and why?

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3.4 THE STORY OF HUMAN COMMUNICATION AS A DAY IN OUR LIVES

The communication facilities that we take for granted today actually represent a very recent achievement in the history of humankind. Just how recent they are is dramatically described by Frederick Williams in an essay, "The 360-century Day".

Let us suppose that the cultural history of human beings begins around 360 centuries ago. Biologically, of course, human beings or *homo sapiens* are thought to have evolved much earlier: about 200,000 years ago, spreading out of Africa 100,000 years ago. But from around 34,000 BCE to 10,000 BCE, we find *homo sapiens* making the cave paintings found in France, Italy and Spain, and in parts of India such as Bhimpetka near Bhopal. (Note: BCE = Before the Christian Era; CE = Christian Era.) The author of the cave paintings was "Cro-Magnon" man of the Paleolithic period. These were Stone Age people, cave-dwellers and tool-makers; and it has been conventional in Western thought to begin the cultural history of humankind with the Cro-Magnon human, going back 360 centuries.

Let us take these 360 centuries of our cultural existence, then, and "map" them onto one day of twenty-four hours – let us pretend that 360 centuries can be seen as a single day in the existence of human beings. We would thus get "a day in the history and evolution of communication" among humans. What does this day look like?

We begin our day at midnight (as is the convention: 00 hours). (Imagine that "the first human baby" was born at midnight.) From the beginning, at midnight, we have language, in the form of speech. We also have pictures, as we have already mentioned – the cave paintings of Stone Age people, drawn and used perhaps for magic rituals, for protection and good luck during the hunt. But we do not yet have writing.

The origin of writing is commonly taken to be around a mere 5000 years ago. So the journey from speech to writing takes 31,000 years or 310 centuries, from 360 centuries ago to 50 centuries ago. In terms of our Communications Day of 24 hours, it takes 20 hours and 40 minutes.[1] (The "first human baby" is now 20 hours and forty minutes old, and it is late evening on the first day of its life.)

New Day	12:00 Midnight	*Homo sapiens*, language (speaking) ; 34,000 BCE
	8: 00 a.m.	Cave paintings
	12:00 Noon	Nothing
	6:00 p.m.	Nothing
	8:00 p.m.	*Sumerians*, writing, 4000 BCE

√ **Check Your Progress 3**

3. What communication tool did we have "at midnight" in "a day in our communication history"?

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4. How long ago did human beings learn to capture speech as writing?

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5. Did they draw pictures much before they learnt to write? How do we know?

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6. Where can you see the cave paintings of early human beings?

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7. What do "BCE" and "CE" stand for?

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[1] Table adapted from Williams 1982:25

What is the next great leap forward in communications? Let us say, printing. This happens in 600 CE in China, but in 1453 CE in the Western world, with the Gutenberg Bible. Now let's look at our clock: it is already nearing midnight again – it's 11:38 p.m.!

The telegraph appears at 11:53 p.m., in the year 1855 CE, and for the first time, as McLuhan points out, a message can travel faster than the messenger. And then, the last five minutes of the day "explode with new communications technologies. We are on an acceleration curve of communications inventions":

11:55:02	the telephone	1876 CE
11:56:48	commercial radio	1900 CE
11:57:04	sound motion pictures	1912 CE
11:57:40	prototype electronic computer	1942 CE
11:57:50	Xerography	1946 CE
11:58:02	colour television	1951 CE
11:58:32	first commercial satellite	1962 CE

Williams makes the point that "the greatest growth in communications technologies has been in our lifetimes and it is still accelerating. This is in remarkable contrast to the approximately 180 lifetimes which separate the invention of writing from the invention of printing in our communications history".

Frederick Williams was writing in 1982, so many of the technologies that have evolved during your own lifetime are not mentioned by him! Notice that he does not mention the personal computer, the laptop and the palmtop, the Internet, or the cell phone ... His list of inventions perhaps looks old to you already. So let's do the following activity:

√ **Check Your Progress 4**

8. *Activity* Arrange the following communication technologies in their order of appearance. *the radio; printed books; the telephone; television; the Xerox machine*

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   Add your own technologies to this list. Try to find out the dates of their first appearance.

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9. Why do we say that there has been a "communications explosion" in the last hundred years or so?

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10. What does it mean to say that with the invention of the telegraph, for the first time "the message could travel faster than the messenger"? *Hint*: Think of how messages were sent by the kings in history, and in mythology. Were the messengers always human?

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11. Williams says writing and printing were separated by about 180 "lifetimes". How many years is each "lifetime", on this account? [How many years separate the invention of printing in the Western world, and the invention of writing?]

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3.5   COMMUNICATION AND SOCIAL CHANGE

Communication theorists maintain that periods of human social change correlate with changes in communications technologies. The human being and his brain have remained essentially the same for unimaginable stretches of time, because biological change is evolutionary change, which takes place over millions of years. But changes in communications, we have seen, can occur very rapidly, within a single lifetime. Such communication changes have brought about social changes that seem to fundamentally alter the kinds of learning that our brains must adapt to. They also alter our perceptions of nation, society, family and values. Can you think why this would happen?

Let's take one example. The invention of printing made possible a transition from oral to literate societies. Before printing, most people were illiterate: it wasn't expected that everyone should be able to read and write, because the materials for reading and writing were not available cheaply and plentifully. Books were handwritten and illustrated by hand, and very precious because there were no cheap copies. It was printing that made the idea of universal literacy feasible. It was printing that led to the expectation that every human being should be able to read and write, and attend school!

Earlier, when the transmission of knowledge was oral, the idea of "distance education" was unimaginable. Both teacher and taught had to be physically present, and each teacher had only a few pupils; knowledge was imparted through interaction between teacher and taught, and perhaps this is what gave rise to the *guru-shishya parampara*, or the Socratic mode of education through dialogue. (Today we can return to oral education and combine it with distance education, because of the availability of media that carry the spoken word across distances: the radio and television!)

When education (and communication) was primarily oral, there was a great emphasis on memory, and speech skills. Memory was the technology that preserved information and passed it on from generation to generation, in the absence of books, and audio or video cassettes, CDs and DVDs. Both a grammar of Sanskrit (by Panini) and a dictionary of Sanskrit, the *Amara Kosha*, have been preserved in this way for generations by memorization, for example. This is why it was important to memorize things accurately. Speech was the medium through which information was passed on; so it was important to recite what you knew clearly and exactly. The importance of memorization in education has steadily decreased, as we depend increasingly on books and reference documents, and calculators and cell phones, to store information such as facts and figures, or phone numbers and addresses; or to perform simple

arithmetical calculations. The idea is that in this way we can use our mental energy in more creative ways.

Certainly, the kind of globalization that we are witnessing today would not be possible without the electronic communication technologies that have been discovered just in the last half-century or so. Imagine that you lived over a hundred years ago, before the invention of the aeroplane, in a time when telephones were still few and far between, and not very efficient. If you sailed away, as some of our countrymen and women did, to a country in the South Pacific, or Africa, or South East Asia, you would soon lose touch with the world and the people you had left behind. Today, however, we have people on different continents who keep in touch by "chatting" on the Internet, which is equipped with a "webcam" or camera, and these people form "virtual communities"! These virtual communities exist for not only personal or familial reasons – a son or daughter keeping in touch with parents, spouses keeping in touch with each other – but also for business reasons, as you are perhaps well aware. The Information Technology industry has opened up an entire new line of work in our times, made possible by the instantaneous communication links between continents via computer and satellite.

David Graddol tells us (in The Future of English, page 31), "Cost has been, traditionally, a major barrier to long-distance calls. But the cost of communication has lowered dramatically… The first transatlantic telephone cable, laid in 1956, allowed 36 simultaneous conversations; the latest undersea fibre-optic link is capable of carrying 600,000." Telecommunications technology has therefore moved towards a "communication network" in the shape of the Internet, where a personal computer connects directly with another personal computer, instead of going through a hierarchy of "gatekeepers". (Older people may remember a time when all telephone calls were mediated by an "operator," and for a long-distance call, whether national or international, you would talk first to the local "operator", who would speak with the "operator" at the destination, who would speak with the person you wished to talk with – so there were two "mediators" between you and the person you called! Today you can just dial the number and speak on.) Graddol continues: "This shift towards a communication network rather than a hierarchy allows dispersed 'discourse communities' to emerge, based on shared interests such as hobbies, (gardening, exotic fish), criminality (terrorism, pornography) or support (ulcerative colitis sufferers, parents of children with Downs syndrome). Diasporic cultural and linguistic groups can share concerns, ideas and decision making as never before." The word *diaspora* means 'a spreading of people' (from a nation or a culture); *diasporic* is its adjectival form. We often hear of the 'diaspora' of Indians in Britain, Fiji, etc., who form a market for Hindi films. With the Internet, there can be communities that are spread out, but linked by a specific common interest, such as a language or a hobby. These diasporic communities are also sometimes called 'virtual communities', that exist in a 'virtual reality' created by the Internet.

√ **Check Your Progress 5**

12. Fill in the blanks.

   a. When education was _____ , there was a great emphasis on memory, and speech skills.

   b. Memory was the _____ that preserved information and passed it on from generation to generation, in the absence of books, and audio or video cassettes, CDs and DVDs.

   c. Both a _____ of Sanskrit (by Panini) and a _____ of Sanskrit, the *Amara Kosha*, have been preserved in this way for generations by memorization.

d. The importance of memorization in education has steadily _____ as we depend _____ on books and reference documents.

e. The idea is that in this way we can use our _____ _____ in more creative ways.

f. When the transmission of knowledge was oral, the idea of "_____ _____" was unimaginable.

g. The invention of _____ made possible a transition from oral to literate societies. It was printing that made the idea of _____ _____ feasible.

h. Today we can combine oral education and distance education, because of_____ that carry the spoken word across distances: the _____ and _____!

i. People on different continents who keep in touch by "_____" on the Internet, with a "_____" or camera, can form "_____ _____."

Activity

Keep a diary of a day in your life, noting down the communication technologies that you use. You may use the technologies mentioned in this section as a guide; you may also add your own technologies to this list.

Now find someone or some people in your neighbourhood who is or are more than 60 years old. Ask them which of these technologies they use; and whether they find it easy or difficult to use them. What do they think about these technologies – do they make life easy, or do they simply lead to a waste of time …? Note down their responses.

Can you think of life without the Xerox machine? How and in what way do you use Xeroxed copies today? What did people do for these purposes when they couldn't make Xerox copies? (For example, we make copies of important documents like marks memos or ration cards, and submit these where they are required. What did people do earlier?)

Play this game Have you ever played this game, which shows how easily a spoken message gets distorted or twisted out of shape? Form a circle with at least four or five players. Whisper a message just once into the ear of your right-hand neighbour. Let this person in turn whisper it to the next person, and so on, until the message comes back to you. What was the message you whispered? What is the message that comes back to you? Compare them. The larger the circle, the more fun you'll have! The story goes that a General once sent a verbal message from the front lines of battle to his Headquarters:

"We are going to advance. Please send reinforcements."

The message the Headquarters received was:

"We are going to a dance. Please send three and four pence."

(three and four pence= three shillings and four pence, the older currency of the U.K.)

3.6   LANGUAGE AND THE NEW TECHNOLOGIES

Coming to writing, today the "short messaging service" or *sms* is reshaping written English (because of the time and space requirements imposed by this medium) in ways that some of us find strange. But we should remember that the medium has always shaped the message. Writing systems have arisen in response to the needs of communication (on the one hand), and of the materials available for writing (on the other).

Thus we find parallels to the *sms* strategies in the "story of writing", of how writing began and changed to the system we know today. Early writing systems had a primitive writing technology (the material on which they wrote, and the stylus with which they wrote). So it was important to them that the written message be brief and economical, just as it is to the *sms* message writer today.

The Semitic languages left out vowels in their writing, because these were predictable from the context; we now find *sms* messages doing the same. *Pls* for *please*, *bk* for *back*, *snd* for *send*, are examples where the vowel sound has been left out: *Pls snd bk immdtly..*

Before the invention of the "alphabet," which assigned sounds to symbols uniquely (that is, there is approximately one spelling for each sound), there was a stage of writing called "rebus writing." Rebus writing made use of "homophony" in language, that is, words that sound similar but mean different things. (For example, *sun* and *son* in English; also *knot*, *not*, *nought*; *be* and *bee*, and so on.) The Sumerians, who invented writing, used the symbol of an arrow, the word for which was pronounced "ti," to denote a word "ti" with the same sound but a very different meaning. As we can now see, the use of '2' for 'to', or 'be4' for 'before,' is a kind of rebus writing. So the *sms* messager of today is actually falling back on strategies for making a message short and easy to write that were used by her forebears, the inventors of writing, some millennia earlier. Indeed, linguists say each generation re-invents language, although adults think children "imitate" or "copy" them.

√   **Check Your Progress 6**

13. Pick out the homonyms (words which sound alike): our, air, road, which, here, hour, witch, heir, hear, rode.

14. Can you read these?

    Bread 'n butter   Fr yr eyes nly   Hppy bday   wash 'n wear

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3.7   LET US SUM UP

➤ Our world is now connected by the instantaneous flow of information between any two points. So our world of experience has the immediacy of life in a village: a "global village".

➤ The railways similarly altered our world a century ago, although today we think of a journey by train as a slow way of travelling.

➤ The communication facilities that we take for granted are actually a very recent achievement in the history of humankind.

➤ If we take the 360 centuries of our cultural existence as a "360-century Day", at the beginning (at midnight) we have language, in the form of speech. We also

have pictures – the cave paintings of Stone Age people. But we do not yet have writing.

➢ The origin of writing is commonly taken to be around a mere 5000 years ago. So the journey from speech to writing takes 31,000 years or 310 centuries.

➢ The next great leap forward in communications is printing: in 600 CE in China, but in 1453 CE in the Western world. Our clock is nearing midnight again!

➢ The last five minutes of the day "explode with new communications technologies. We are on an acceleration curve of communications inventions".

➢ The greatest growth in communications technologies has been in our lifetimes and it is still accelerating.

➢ Periods of human social change correlate with changes in communications technologies.

➢ The invention of printing made possible a transition from oral to literate societies. It made the idea of universal literacy feasible.

➢ When education and communication were primarily oral, there was a great emphasis on memory, and speech skills. Memory was the technology that preserved information and passed it on from generation to generation.

➢ The importance of memorization in education has steadily decreased, as we depend increasingly on books and reference documents, and calculators.

➢ The globalization we are witnessing today is possible because of the electronic communication technologies discovered just during the last half-century.

➢ Dispersed 'discourse communities' have emerged that communicate through their computers, based on shared interests such as hobbies or support. These communities are sometimes called 'virtual communities', that exist in a 'virtual reality' created by the Internet.

➢ Today the "short messaging service" or *sms* is reshaping written English. But we find parallels to the *sms* strategies in the "story of writing." Early writing systems had a primitive writing technology, so it was important for the message to be brief and economical, just as it is to the *sms* message writer today.

➢ So the *sms* messager of today is actually using strategies to write that were used by the inventors of writing, some millennia earlier.

3.8 FURTHER READING

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3.9 ANSWERS TO CHECK YOUR PROGRESS

1. Marshall McLuhan, a Canadian, was a professor of English literature, a philosopher and a communications theorist. He noticed that our world is now interconnected by the instantaneous flow of information between any two points on the globe, however distant or remote. Events in one part of the world can be experienced from other parts as they happen, "in real-time". So our world of experience has the immediacy of life in a village – except that our "village" is now the entire world.

2. It took three weeks to travel from Tiruchi (Tamil Nadu) to Vijayawada (Andhra Pradesh) in 1892, because there was no direct train between these places. People first had to go out of their way to Guntakal. Then they traveled by construction train and canal boats to Rajahmundry. Finally they rode for four days in a cart pulled by bullocks to reach their destination.

3. We had language, in the form of speech. We also had pictures, the cave paintings of Stone Age people, drawn and used perhaps for magic rituals, for protection and good luck during the hunt.

4. The origin of writing is commonly taken to be around 5000 years ago.

5. Yes, they did. We know this because there are cave paintings drawn by Stone Age people.

6. Cave paintings are found in France, Italy and Spain, and in parts of India such as Bhimpetka near Bhopal.

7. BCE = Before the Christian Era; CE = Christian Era.

8. *printed books; the telephone; the radio; the Xerox machine; television*

    Add your own technologies to this list. Try to find out the dates of their first appearance.

9. Please give your own examples, contrasting these with the previous 359 centuries.

10. Until the telegraph was invented, a human messenger, or perhaps a bird like a pigeon, had to physically carry the message. So the message and the messenger were inseparable, and traveled together. With the invention of the telegraph, the message went from one place to another, but the messenger did not have to go with it, carrying it.

11. Writing was invented about 5000 years ago, or about 50 centuries ago. Printing was invented in 1453 CE in the Western world, about 5 centuries ago. So 45 centuries must correspond to "180 lifetimes". 45 divided by 180 is 0.25, which means Williams is calculating 25 years as "a lifetime".

12. a. oral b. technology   c. grammar, dictionary   d. decreased, increasingly

e. mental energy   f. distance education   g. printing, universal literacy

h. media, radio, television   i. chatting, webcam, virtual communities

13. our, hour; air, heir; road, rode; which, witch; here, hear.

14. Bread and butter   For your eyes only   Happy birthday   wash and wear.