
UNIT 26 MEDIATED COMMUNICATION

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26.0 OBJECTIVES

- to understand the nature of a medium of communication,
- to understand that our senses are media, and that media extend the senses,
- to understand the nature of one-way and two-way media of communication,
- to understand that different media have their own characteristics, and can be used in combination, and
- to understand the difference between information and communication.

26.1 INTRODUCTION

What is a medium of communication? We may begin by saying that a medium is a channel that carries information. So when two people are speaking face to face, we may say they use the oral-aural medium, or we may say that they use sound and sound waves as a medium for speech. When we see something or look at someone, we use the visual medium. When we sense a fragrance or a perfume – of incense, of flowers, of spices when food is cooking or served – we use the medium of smell or the olfactory medium.

The sense systems of the human body, then, are media of communication, and we will come back to this idea in a moment. But in the field of communication it has been customary to refer to communication by electronic means in the public domain, as media. So you probably use the word media now to mean 'radio and television'. The word 'print media' has now been formed to distinguish print from these electronic media. Moreover, the word 'media' is preferably used for broadcast media, which has a distributed but massed audience, so that the medium of the Internet is not at first readily thought of when we use the word 'media'. Media have come to mean 'mass media'.

In this block we shall look at all these media of communication (except print, which we have already considered). Let us begin by looking at our sensory systems.

26.2 OUR SENSORY SYSTEMS AS MEDIA

We have five senses: sight, hearing, touch, smell and taste. These senses are our channels of information about the world around us. In a very real sense, they create our world. You can readily appreciate that the world feels different to someone who is 'differently abled', or 'challenged' in some way. A person who lacks one of these sensory media appears to maximize their use of the other senses. You may have observed how much more sensitive than yourself a blind person is to sound; or you may have remarked on their superior memory, or superior hearing. A deaf person is often very sensitive to body language and social atmosphere, and of course their skill of lip reading reminds us that speech has a visual dimension that we rarely pay attention to.

But even those of us who have all our five senses intact are in fact limited by them. To see this, we must first understand that our sensory systems respond only to some kinds of physical energy or stimuli. Let us see how.

Vision depends on light – on visible light. In terms of physics, light is part of the energy of the electromagnetic spectrum. We know that there are kinds of light that we do not see, for example, at either end of the spectrum, we have ultra violet light and infra red light. We cannot detect the presence of these kinds of light; we are 'blind' to them.

Light, we have said, is part of the energy of the electromagnetic spectrum. We know that magnetic energy exists; many of us have seen this demonstrated with the use of a magnet and iron filings! But we do not have a sensory system that taps into magnetic energy. We do not, for example, navigate with our bodies using the earth's magnetic poles for reference! Scientists are still investigating the use of the earth's magnetic field for navigation by migratory birds, and by homing birds such as pigeons. There are even studies that suggest that human beings may also have some sense of orientation to the earth's magnetic poles. It is true, moreover, that we speak metaphorically of being attracted to a person or being repelled by a person, or of a 'magnetic' personality that we may feel 'drawn towards'. Nevertheless, we do not have a magnetic sense the way we have the other five senses. Nor can we sense the presence of X-rays.

In the domain of hearing, our range of audible sound lies between 20 and 20,000 hertz. There are very low sounds that we do not hear – for example, sounds made by whales as they 'talk' to each other. A scientist at a seminar once played a sound that mimicked the drone or low hum of a steady aeroplane. He informed us that this was the sound made by the earth as it rotated, compressed many thousands of times! There are also high-pitched sounds that lie beyond our range. Dogs can hear these sounds perfectly well, and so there are dog-whistles on the market that are inaudible to human ears, that serve very well for calling your dog!

Most of us do not have very well developed senses of smell and taste, especially in comparison with, say, dogs. But you may have heard of people who are tea-tasters or wine-tasters or perfume testers. Such people have a natural gift for distinguishing and remembering fine distinctions in the flavours of these products.

√ Check Your Progress 1

Complete the following sentences.

1. We have five senses: _____, _____, _____, _____, and _____.

2. Our vision is not responsive to all forms of light. We cannot see _____ and _____ rays.
3. We cannot sense _____ energy or _____.
4. Dogs can hear _____ sounds than we can.
5. Our sensory systems function as _____ that give us information about the world.

26.3 MEDIA EXTEND OUR SENSES

In Block 1 we introduced you to the idea that the world is now a global village. This is possible because the media extend our senses across space and through time. We have already mentioned some examples of this: we can view a sports event live as it happens halfway across the world, on our television screens, sitting up at night to watch what is happening in broad daylight on the other side of the world!

Before the invention of the gramophone, voices could not be preserved. We do not know what Aristotle or Abraham Lincoln or Ashoka or Bhartrhari or Panini or Shakespeare or Dickens or Kalidasa or Tansen sounded like. But we are lucky enough to be able to listen to recordings of the voices of Gandhiji, Pandit Nehru, Rabindranath Tagore, K.L. Saigal, John F. Kennedy and many, many others from the last century. The audio tape has extended our sense of listening across time.

It is not only the electronic media or the mass media that have the property of extending our senses. Every time a driver looks into his rear view mirror, he is extending his vision – towards the back. So a simple mirror can be a medium that extends our senses. But the electronic media are now a constant and pervasive presence in our lives.

Have you ever noticed how people tend to leave the radio switched on and the television playing, even if they are not there to hear or watch? Perhaps you have done this yourself, and been reprimanded for wasting electricity! But Marshall McLuhan argues that we naturally tend to leave the electronic media 'on', because they extend our senses. We don't 'switch off' our hearing or our sight when we are awake. Our senses are always 'on.' By the same logic, the media, which extend our senses, are also not switched off. They are always 'on'! Whether you agree with this idea or not, it is true that most computer systems around the world, in countries where power saving, power shortages and power breakdowns are not an issue, are simply left on twenty four hours a day. So perhaps McLuhan has a point!

Check Your Progress 2

6. Complete the following sentences.
 - a) Media extend our senses
 - b) Before the invention of the gramophone.....
 - c) The audio tape has extended
 - d) Every time a driver looks into his rear view mirror, he is
 - e) Marshall McLuhan argues that we naturally tend to leave the electronic media 'on', because

7. Do you agree with McLuhan that it is 'natural' to leave the radio or television set switched on even if you're not really watching? Do you approve of this practice? Give a reason or reasons to support your answer.

26.4 ONE-WAY COMMUNICATION AND TWO-WAY COMMUNICATION

Communication is classically described as a two-way process: an interaction between a sender and a receiver. The expectation is that the sender and the receiver will take turns and switch their roles, both contributing to the construction and the reception of the message, as in a conversation.

In this scenario, the media are a unique form of communication, because they seem largely to be one-way communication channels. The media professionals construct messages, and the audience is a consumer of the message. So media have been described as one-way communication channels, and they have been exhorted to gather as much feedback as possible about how their message is being received by the audience. It can be very tiring and counterproductive to talk into a microphone or into a camera everyday and not know if anyone is listening out there!

Media houses have therefore always invested in audience research surveys and polls in order to get some feedback about how they are doing. Traditionally, they have also invested in programmes that allow the audience to interact with them, such as

- request programmes for songs as birthday greetings for friends and relatives
- listeners' letters programmes (over the radio) and readers' letters to the editor (in newspapers).

But advances in technology have made possible a more direct and immediate interaction between the mass media and their audience. This has become possible through the judicious use of a mix of media.

26.4.1 Using a mix of media

The first mix is between the telephone, and the radio or television. Phone-in programmes are always popular, where audiences call in to ask questions of an expert after an interview, or to express their opinion in a debate. Health and pet care programmes often begin with an expert speaking on a topic, and then continue with a phone-in component where callers from all over the country interact with the expert and present their problems and questions to him or her. Sports programmes too encourage viewers to call in with suggestions and questions and comments on the day's play. You may recall the 'phone-a-friend' option in a popular game show that allowed the players on the set to interact with a person of their choice who was not in view. This show also had an 'ask the studio audience' option; having a studio audience for a game show is another time-honoured way of overcoming the limitations of one-way communication.

More recently, the Internet and the cell phone have become media partners in interactive programming. Most news channels now have a simultaneous audience opinion poll by sms (short messaging service) accompanying contentious news stories. The audience's opinion is solicited on whether Indian culture is being eroded, whether politics is ruining sports, and on a number of other such current controversies.

Viewers are encouraged to log on to the Internet for more details of news stories, and to register their response; many of these responses are flashed on the screen.

Indeed, some channels now allow the audience to vote on which news stories they want to view, and these are shown in order of their popularity on a special programme of news chosen by audience poll. The increase in citizen journalism, and the encouragement this receives from the media houses, is also a child of advances in home video technology and the eagerness of the mass media to give their audiences a sense of participation.

These are the various ways in which the mass media attempt to turn a one-way communication channel into a two way, interactive communication channel.

√ Check Your Progress 3

8. Listen to a radio phone-in programme or watch a television programme where the audience phones in. Make a note of

- The number of calls received
- The towns or cities from which the calls are received
- The names of the callers: are they male or female? What do they say about themselves?

9. Fill in the blanks.

Media houses have invested in _____ in order to get some _____ about how they are doing. Traditionally, they have also invested in programmes _____, such as request programmes for songs, listeners' letters and readers' letters to the editor.

But _____ have made possible _____ between the mass media and their audience. This has become possible through the judicious use of _____.

The first mix is between _____.
Phone-in programmes are always popular. More recently, the Internet and the cell phone have become _____.

10. Watch a news programme where either a citizen journalist is featured, or an audience poll, or audience preferences about news are taken into account. Record your observations. (Use the space at the end of this unit if necessary.)

The use of a mix of media is not limited to considerations of audience feedback, however. In the unit on television you will read about how television programmes that have good academic content are often 'wrapped around' with print, and enter the university or college curriculum in this way. The classic examples of such programmes are *The Ascent of Man* by Jacob Bronowski, and *Cosmos* by the astronomer Carl Sagan.

With the advent of animation and image editing programmes on the computer, television programmes have become increasingly sourced from computerized graphics and images.

On TV screens today, many images are seen that have never been shot by a camera. Most graphics and company logos, for example, are computer generated.

Computer technology has made animation much easier and simpler than it was in the era when image after image had to be painfully drawn by hand. Computer graphics are used not only in logos and in advertising; they are used to convey concepts that are physically not possible to illustrate, such as the micro world of bacteria or the atom, or the macro world of the cosmos, the black hole and the supernova.

26.4.2 Spatial and Temporal Media

The radio is one-dimensional: it uses only the medium of sound. It is a 'temporal' medium, because it uses speech, and speech occurs in time: in the media we call it 'real time'. That is, if someone makes a one-minute (or one-hour) speech, the listener has to spend the same amount of time listening to the speech! Contrast the medium of print: print is a spatial medium.

In English we ask how 'long' a book is, just as we ask how 'long' a radio programme is. For print (the book), the answer is a number that refers to the number of pages or the number of words on a printed page: these exist in space. For radio (and television, and film), the answer is in a number that tells us the time taken by the programme: twenty minutes, or an hour, or a four-and-a-half hour film ... While a book can be read at the pace and the time that the reader sets or chooses – slowly or quickly, or every day for half an hour while waiting for the bus, for example – a radio or television programme, or a movie, have to be seen at the pace that the producer has set, and at a time and place chosen for the viewer. Film and television are spatio-temporal media (they occupy physical space on film, and on the screen) but they are more temporal than spatial. The images move on at their own pace, whereas the pages of a book are turned by the reader.

The lack of control over radio, television and film by the viewer has however been redressed with the invention of recording technologies such as audio and video tape, and more recently, compact discs (CDs) and digital video discs (DVDs) on the computer. The Open University in Britain found, for example, that their audio and video material were used much more when they were supplied in a recorded form, than when they were broadcast on radio or television. This is because on tape, students could listen to or view a programme at their own time and pace, just as they would a book. Often they found that the broadcast on a certain topic came at a time when they had not read the accompanying print material yet, so they were not prepared to listen or view the broadcast. Added to this, of course, was the problem that the broadcasts occurred at fixed times, so if for any reason those times were not convenient to them, they missed the broadcast. With audio and video tape the students were able to control what they listened to or viewed, and when.

Audio and video tape, moreover, are spatial media like print in that the tape can be stopped, rewound or fast forwarded, or replayed as many times over as the listener or viewer chooses, just as the pages of a book can be skimmed through, and re-read as often as you choose. The tape traps the images and words the same way the book traps the words.

✓ Check Your Progress 4

11. Why is the radio called a temporal medium?

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12. What are film and television called?

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13. What is print called?

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14. How can the listener or viewer regain control over the temporal or spatio-temporal media?

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15. Do recorded media have an advantage over broadcast media when they are used in education?

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26.5 INFORMATION AND COMMUNICATION: WHAT IS THE DIFFERENCE?

In his book *Learning and Visual Communication*, David Sless describes an event that was at first taken to be an instance of communication, and then understood to be merely information. This event was the discovery of pulsars, or pulsating stars, by astronomers in the year 1968. "In 1968 a group of radio astronomers discovered, almost by accident, the existence of a radio source which showed regular fluctuations in energy. ... there was a flurry of excitement and speculation about its origins and causes." A scientist describes the experience in these words:

... the excitement rose when we found that the pulses were coming from a body no larger than a planet ... relatively close to us ... Were the pulses some kind of message from another civilization?

Sless sees this story as an illustration of 'the knife edge of the distinction between what is and what is not communication'. On the one side there was a natural and

unexplained phenomenon; on the other a message with an unknown sender and an unknown meaning. For the brief period of time that the scientists entertained the possibility that the pulses were a message, the kinds of questions they asked changed fundamentally. They no longer asked 'what' it was, but 'who' sent the pulses, and 'why' they were sent. Questions of intention, meaning and authorship entered the debate. 'It is as if the message were a garment and we try to deduce the shape and character of the wearer from a study of the clothes.' The explanation we look for is no longer purely physical: the 'inexorable world of physical processes is replaced by the capricious symbolic world of consciousness'.

The point to note is that communication demands a level of inference from the receiver, about the message and its authorship. The media especially lead to a situation where such inference becomes necessary. This is because the media allow a message to exist independently of the person who creates the message. In an oral society, the speaker – the orator, the poet, the conversationalist – has to be in the physical presence of his audience. The audience may know the communicator, or at least be able to interact with him or her and question him or her.

The human who, thousands of years ago, carved out a message on a stone or drew a charcoal figure in a cave, used these media to create a message that today exists independently of the creator; and mediated communication came into being. Today we speculate who created the cave paintings of thirty five thousand years ago, and why (there are suggestions that these were created as part of magic rituals for the safe return of hunters). When we look at the seals of the Indus Valley with their etchings of animals and symbolic shapes, we study these and try to think who created them and what they mean. Are these the forefathers of people now living in the southern parts of India? Is their language related to the Dravidian languages? These are the kinds of questions researchers are asking.

From Indus Valley to coastal Tamil Nadu (report in *The Hindu*, 03.05.08)

In recent excavations in Nagapattinam district in Tamil Nadu, megalithic pottery with graffiti symbols that have a strong resemblance to a sign in the Indus script have been found. ... the arrow mark graffiti are always incised twice and together, just as they are in the Indus script.

While the megalithic/ Iron Age pottery in Tamil Nadu is datable between the third century B.C. and third century A.D., the Indus script belongs to the period 2600 B.C. to 1900 B.C. of the mature Harappan period.

The tale of a broken pot by Irvatham Mahadevan and S. Rajagopal (from *The Hindu*, 13.05.08)

Today I am a broken pot ... but about eighteen hundred years ago, I was a shining new *kalayam*. My proud owner was a toddy-tapper named Naakan. ... Naakan was literate ... he scratched this message on his *kalayam* with his sharp iron tool: *naakan uRal* 'Naakan's pot with toddy sap'.

I was made in about the third century A.D. Epigraphists (who study old inscriptions) have identified the writing on my shoulder as Old Tamil ...

'Every aspect of the environment may be regarded as a source of **information** but only those aspects which are subjected to the kind of interrogation which has been described above will be defined as **communication**', declares Sless. He continues: 'There is a clear implication from this that not all things which were intended as messages will be seen as such, and equally there will be cases where information from the environment is mistakenly construed as a message.' He illustrates this with the case of the 'wink/ twitch'. Suppose you are speaking with a person who, every so often, closes an eye and opens it, rapidly. At first you might think this was a wink – the person was deliberately closing and opening an eye to indicate to you that

what he was saying was humorous or satirical, and not to be taken seriously. But if the 'wink' recurred, and it recurred at times in your conversation that you could not give any humorous meaning to it, you might conclude that it was a 'twitch': an involuntary spasm of the muscles controlling the eye. Then you would stop trying to attach meaning to it, and do your best to ignore it! Interestingly, in English, the rapid opening and closing of the eye is called a 'wink' if it has an communicative intent, and a 'twitch' when it does not.

Finally, notice that there is a grey area where the communicator may not be consciously transmitting a message, but a message can nonetheless be inferred by the recipient. This is the area of 'body language', which is said to 'communicate' moods and attitudes. We have already looked at some characteristic gestures and instances of body language in the very first block of this course. The important point is that the sender may be quite unaware of the messages of boredom or interest that is being sent out by his or her body language!

√ Check Your Progress 5

16. What did the scientists first think when they received signals from the pulsars?

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17. How did their questions change when they thought this?

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18. When do you call a rapid closing of one eye a 'wink', and when do you call it a 'twitch'?

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19. Why is body language a 'grey area' between information and communication?

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26.6 LET US SUM UP

1. A medium is a channel that carries information.
2. The sense systems of the human body are media of communication.

3. In the field of communication we refer to communication by electronic means in the public domain, as media.
4. So the word media now means 'radio and television'. The word 'print media' distinguishes print from these electronic media.
5. The word 'media' is preferably used for broadcast media, which has a distributed but massed audience, so that the medium of the Internet is not at first thought of when we use the word 'media'. Media have come to mean 'mass media'.
6. We have five senses: sight, hearing, touch, smell and taste. These senses are our channels of information about the world around us. They create our world.
7. Our sensory systems respond only to some kinds of physical energy or stimuli.
8. The media extend our senses across space and through time. Before the invention of the gramophone, voices could not be preserved. The audio tape has extended our sense of listening across time.
9. A simple mirror can be a medium that extends our senses. But the electronic media are now a constant and pervasive presence in our lives.
10. The media are a unique form of communication, because they seem largely to be one-way communication channels.
11. Media houses have therefore invested in audience research surveys and polls to get feedback. Traditionally, they have also invested in programmes that allow the audience to interact with them.
12. The judicious use of a mix of media converts one-way communication into two-way communication.
13. The first mix is between the telephone, and the radio or television. More recently, the Internet and the cell phone have become media partners in interactive programming.
14. The use of a mix of media is not limited to audience feedback. Television programmes that have good academic content are often 'wrapped around' with print, and enter the university or college curriculum in this way.
15. With the advent of animation and image editing programmes on the computer, television programmes have become increasingly sourced from computerized graphics and images.
16. The radio uses only the medium of sound. It is a 'temporal' medium, because it uses speech, and speech occurs in time.
17. Print is a spatial medium. Film and television are spatio-temporal media (they occupy physical space on film, and on the screen) but they are more temporal than spatial.
18. The lack of control over radio, television and film by the viewer has been redressed with the invention of recording technologies such as audio and video tape, and compact discs (CDs) and digital video discs (DVDs) on the computer.
19. The tape traps the images and words the same way the book traps the words. The Open University in Britain found that their audio and video material were used much more when they were in a recorded form, than when they were broadcast on radio or television.

20. Communication demands a level of inference from the receiver, about the message and its authorship.
21. The media especially lead to a situation where such inference becomes necessary. This is because it is the media that allow a message to exist independently of the person who creates the message.
22. There is a grey area where the communicator may not be consciously transmitting a message, but a message can be inferred by the recipient. This is the area of 'body language', which is said to 'communicate' moods and attitudes.

26.7 FURTHER READING

David Sless, Learning and Visual Communication. 1981. Wiley: New York.

James Monaco, The language of film: signs and syntax.

26.8 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

1. a) vision or sight, hearing or audition, taste, smell and touch.
b) infra red, ultra violet
c) magnetic, X-rays
d) higher or more high-pitched
e) media
2. Please give your own opinion and a supporting reason.
3. across space and through time
4. voices could not be preserved
5. our sense of listening across time

Check Your Progress 2

6. extending his vision
7. they extend our senses

Check Your Progress 3

8. Please make a note of the data requested, from your own experience.
9. audience research surveys and polls, feedback, that allow the audience to interact with them, advances in technology, a more direct and immediate interaction, a mix of media, the telephone, and the radio or television, media partners in interactive programming.
10. Please record your own observations.

Check Your Progress 4

11. The radio uses the medium of sound, which occurs in real time.

12. Film and television are called spatio-temporal media, because they exist in time as well as on film or tape.
13. Print is called a spatial medium.
14. The listener or viewer can regain control over what is seen or heard, and where, by using recording media such as audio or video tape, or CDs and DVDs. These recording media allow the listener or viewer to pause, stop, rewind and replay, or fast forward, just as the pages of a book can be flipped at will.
15. Yes, broadcasts may occur at an inconvenient time of the day, or come at a point where the learner has not prepared to listen to or view the broadcast. Whereas a tape can be used when the learner is ready for it.

Check Your Progress 5

16. The scientists thought they were receiving messages from outer space.
17. They did not simply ask what the pulses were. They started to think of who was sending the pulses, and why. So they were asking questions that inferred the nature of the sender and the intention and meaning of the message.
18. If the person closing the eye intends to do so, it is a wink, and means that there is a humorous aspect to what he or she is saying. If the person has no control over the eye, it is a twitch, and no message is intended: it is not a piece of communication.
19. Body language may communicate attitudes and motives without a person being aware of this. So there is no intention to communicate. All the same, there may be a subconscious message, which can therefore be decoded by the receiver, who infers the attitudes or the motives of a person by his or her body language and gestures.