
UNIT 3 ESSENTIAL PRODUCTION TECHNIQUES : ADAPTING FOR TV

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3.0 AIMS AND OBJECTIVES

The aim of the unit is to help you understand the organisational background of television and the factors that influence writing and adapting for TV.

At the end of the study of the unit, you will be able to:

- broadly understand the context of writing for TV
- note the characteristics of TV and other media of mass communication
- state what makes TV so powerful a medium
- know about TV news gathering and dissemination and the overall context of writing for TV
- state the criteria for adapting to TV.

3.1 INTRODUCTION

Television production involves dissemination of pictures with words directly to the viewer's mind. A **moviegoer**, for example, goes to the theatre, well dressed up and ready for the occasion. **But** a TV viewer is **informal**; viewing TV is a part of his routine. TV viewing is a family affair; watching a TV programme in the drawing room is not a formal event.

Hence, the response to TV programmes cannot be uniform and predictable as arising out of a uniform social milieu but is heterogeneous and varied. To arrest the attention of such an audience, therefore, is not easy. The format has to be interesting, the script has to evoke instant **responses** and reaction. It is, therefore, necessary to understand the background and **the context** of writing for TV.

In the earlier unit of **this** Block, you learnt about the reach and potential of TV as an instrument of **furthering** one's frontiers of knowledge through entertainment. This unit will help you to understand the basic techniques for writing and adapting for TV. We have given you an **example** of how to write for TV news. Study the unit carefully and bring to bear on your study your own experience of TV viewing.

3.2 TV AS AN AUDIO-VISUAL MEDIUM

As already described, TV programme essentially means picture and sound married to words. In fact, it is a simple operation but it may become complex, once words do not keep pace with **the pictures** and sound. While one reads a newspaper, the reader is prepared for a cerebral exercise. But a TV viewer feels like watching an event or an idea converted into images and transported into his drawing room. TV programmes, therefore, should be as close to reality as possible. Hence, simulated situations, expressed "audio-visually", are required to be presented on TV.

The contribution to a TV programme is facilitated by:

- i) ideas
- ii) artists who present these ideas
- iii) equipment that transfers the idea to audio and visual images
- iv) the production team
- v) last, but equally important, the viewer.

All these have equal importance in the TV scheme of things. The combined efforts of these five constitute the uniqueness of TV, its characteristics.

3.2.1 Characteristics

Let us discuss the five basic ingredients of a television programme; no television programme would be possible without them.

Ideas

All programmes start with an idea — even one as simple as 'let's put the news on television'. Remember that television is a channel of communication from the mind of **the** producer to the mind of the viewer. If the producer has no idea in the first place, what will get to the mind of the viewer?

Artists

These can range from the man reading the news to an all-star cast of international artists. All are equally important to the programme they are in. They are human beings, **and** should be treated as such. Also, many of them find a television studio a strange and **difficult** place to work in. A good production team will make allowances for this.

Equipment

Even the simplest studio needs one or more cameras, usually mounted on some sort of **moveable** pedestal; lights to produce good quality pictures; microphones to pick up the sound; scenery, whether it be the studio wall, a **cyclorama** or a full drama set; communication-talkback — from the control gallery to those working on the studio floor; and a floor monitor so that all those involved in the production can see the picture **they** are helping to make. The control galleries will need sound mixing equipment, a vision mixing panel, lighting control, and camera controls. In addition, there will be a lot of other equipment which is needed to help the studio make broadcast standard pictures and professional quality sound.

Production Team

These are the people who put the programme together, and who work in the studio to **get** it on the air.

Although television companies **may** vary in their detailed production methods, the **basic** process must be the same everywhere to make good economical television programmes.

The staff of a television production team are distributed among four general areas:

Production

Programme Services

Technical Operations

Engineering

Since it is people that **make** television, let us look at them in more detail.

Production: The number of people working on one programme in the production area may be as few as two (it really does not work with one) or as many as four hundred.

Their basic role is to think up ideas, and translate them onto television. It is as simple as that, although their **actual** jobs within the station may be many and varied **e.g.:**

PROGRAMME CONTROLLER

PROGRAMME DIRECTOR

STATION MANAGER

EXECUTIVE PRODUCER

PRODUCER

DIRECTOR

SCRIPT WRITER

NEWS READER

ACTOR

PRODUCTION ASSISTANT

RESEARCH ASSISTANT

DIRECTOR'S ASSISTANT

INTERVIEWER ETC. ETC.

However big or small a programme, there are certain key people without whom good television is just not **possible**. Their titles may vary from country to country, and even within the same **organisation**; but what they do is the same everywhere.

Producer is:

- the person who has **the** idea, or who buys the idea
- the person who **writes** the idea or script, or who buys the talent to write the script
- the person who **controls** the facilities and people working on the programme, without himself necessarily being technical or creative in any one specific area
- the person who **controls** the budget
- the person who thinks he knows what the viewer wants.

Director is the person **who** interprets the idea, who turns it into people, shapes, sounds, images, moods. He communicates the idea to the viewer, he pulls together many **skills** and crafts, and puts **them** into shape. In terms of craft and artistic skill he may well be superior to the **producer**. He is, however, responsible to the producer and answerable to him for his action.

Floor Manager is the director's representative on the studio floor. He relays messages from the director to **the** people **taking** part in the programme. He gives the cues that begin or end an action **or** an interview. Sometimes he joins the production on the studio day, but in bigger shows, like drama and light entertainment, he works with the director as a Production Assistant from the beginning of the production.

Producer's Assistant (**s/he**) is a senior secretary who joins the production as soon as possible. In the pre-**production** stages s/he looks after most of the administrative problems; on film **location** s/he keeps a shot list and gives the film editor a cutting order; in the gallery s/he calls **the** shots, and looks after timings; after the programme s/he does liaison with the administration, produces final costs, etc.

Technical **Manager** is **in** charge of all the technical **facilities** in the studio. He **books** special equipment for **the** director and he should be available for technical advice any

time **during** the preparation of the programme.

Sound Supervisor is the senior audio-engineer in a production. He mixes and balances all the sound sources. **VISION MIXER** is the person who switches (cuts, mixes or **wipes**) the pictures, to the director's instructions. In some programmes, like sport and **current** affairs, the director may do his own switching.

In addition to these key staff there are many others as we have already seen : make-up **artists**, **costume** supervisors, scene staff, cameramen, and so on. Everyone is important for the production; and all should work as a team under the leadership of the director; **and** like the artists they too are all human beings and should be treated as such. **They are** members of **the production team** — **not part of the equipment.**

Programme Services: While the production area offers the ideas and the people to translate them, even a small television station needs a Programme Services area to offer practical back-up to production. The area known as Programme Services covers:

SET DESIGN

GRAPHIC DESIGN

COSTUME DESIGN

MAKE-UP

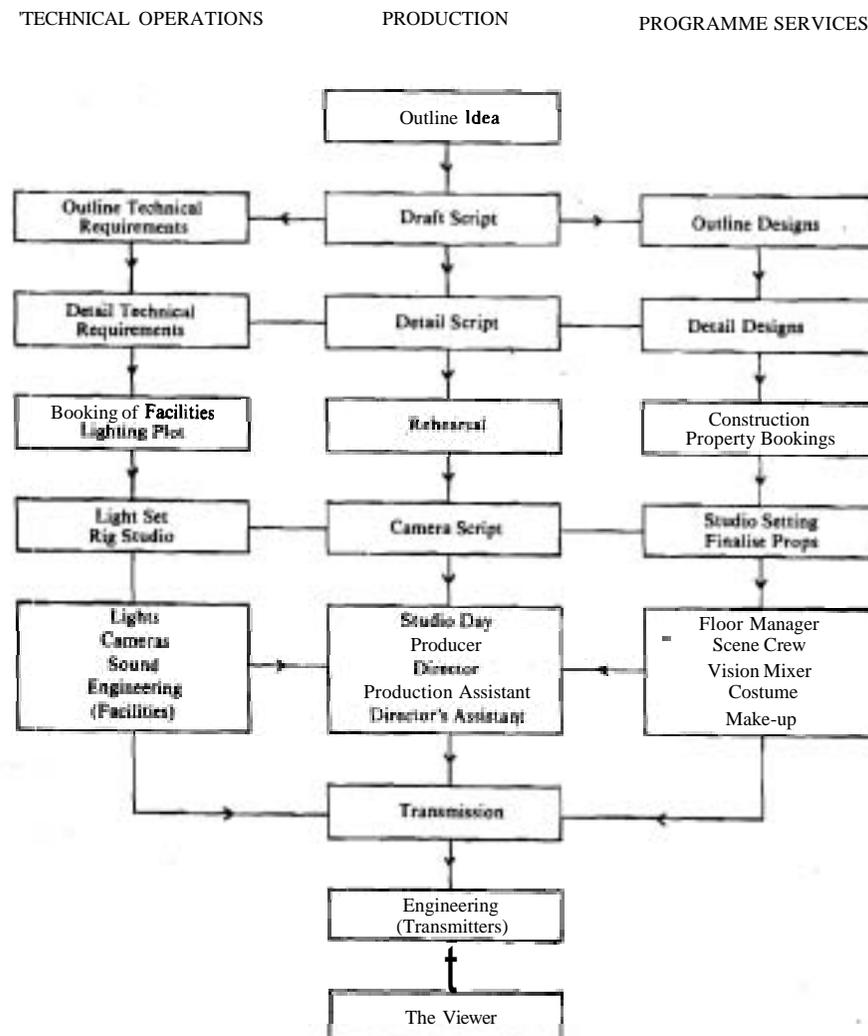
SCENIC CONSTRUCTION

STUDIO MANAGEMENT

FILM SERVICES

SPECIAL FX

PROPERTIES



The varied skills needed by a Programme Services section are:-

DESIGNERS
ARTISTS
DRAUGHTSMEN
HAIRDRESSERS
SEAMSTRESSES
CARPENTERS
SCENE-SHIFTERS
PROJECTIONISTS
FLOOR MANAGERS
VISION MIXERS
FILM CAMERAMEN
FILM EDITORS
FILM SOUND RECORDISTS
PROPERTY BUYERS
SET DRESSERS
ASSISTANT FLOOR MANAGERS
PAINTERS...
AND SO ON.

Technical Operation: A member of the production **area** will first turn an idea into a workable script or **programme** shape and Programme Services will add to this scenery, costumes, art work, **etc.** **Now** a further addition is needed — the action taking place in a studio must be changed into television — sound and pictures.

So we need lights and **cameras** to see, and microphones to hear.

Technical operations **relate** to production of light, sound and vision within the studio. The people in this area **are**:

LIGHTING **DIRECTORS**
TECHNICAL MANAGERS
SOUND SUPERVISORS
VISION OPERATORS
ELECTRONIC **EFFECTS** OPERATORS
CAMERAMAN

ENGINEERING — **obviously** Technical operation is a part of Engineering, but it is also directly associated with a production. Here Engineering means those technical areas indirectly **working** with a programme.

VIDEOTAPE
REPAIR AND **MAINTENANCE**
LINES/COMMUNICATION/SWITCHING
TRANSMITTERS

An outline chart of a typical programme shows how these areas, or different groups of staff, fit into each **other**.

So, although many **different** skills, people and facilities may be involved in making just one programme, the **system** in which they work is also important. It needs two things:

- i) the different areas **must** work together while preparing the programme and
- ii) the work of the **different** areas must join together in the studio such that it all merges into a good **television** production.

nothing short of a long distance hurdles race. There are several stages before the actual **transformation** of an idea into images takes place. For example, let us take the idea of a public purpose ad-insert over the TV about cholera vaccination:

- a) ~~the~~ idea is to be conceived;
- b) ~~the~~ idea is to be developed **i.e.**, how many characters to be included in the event; what time the sequence is to be shot etc.;
- c) ~~the~~ idea, with detail, will have to be reduced to a camera script which contains all the **information** necessary regarding shot details, sound etc.;
- d) once the camera **script** is ready the actual scrip has to be written keeping in view the requirements of the camera, the location, the age, the relationship between characters **and** event sequences;
- e) then comes post-production work like editing, graphic illustrations and finally it is readied for telecast;
- f) finally, it is telecast on a given slot in the transmission time.

3.2.4 Satellite Broadcasting : Expanding Frontiers

TV signals beamed through a transmitter can be multiplied manifold if the same signals are transmitted with the help of a satellite. Satellites, geo-stationary by nature, do serve **a greater** area than any terrestrial transmitter. The command area of a given satellite is much more than that of a transmitter. India has a multipurpose satellite called **INSAT** series that provide telecom facilities, weather information and Doordarshan network services.

The first Satellite TV experiment was carried out with the INTELSAT Satellite in **1975-76** in which social service and educational programmes were telecast. The **experiment** became successful. Thereafter, terrestrial transmitters provided rural TV service.

Doordarshan's satellite network was started in **1983** with the **INSAT-IB** becoming **operational**. Network services for Doordarshan National Channel were launched **through** the network of satellite and microwavelinked **523** High Power, Low Power and **Very** Low Power Transmitters.

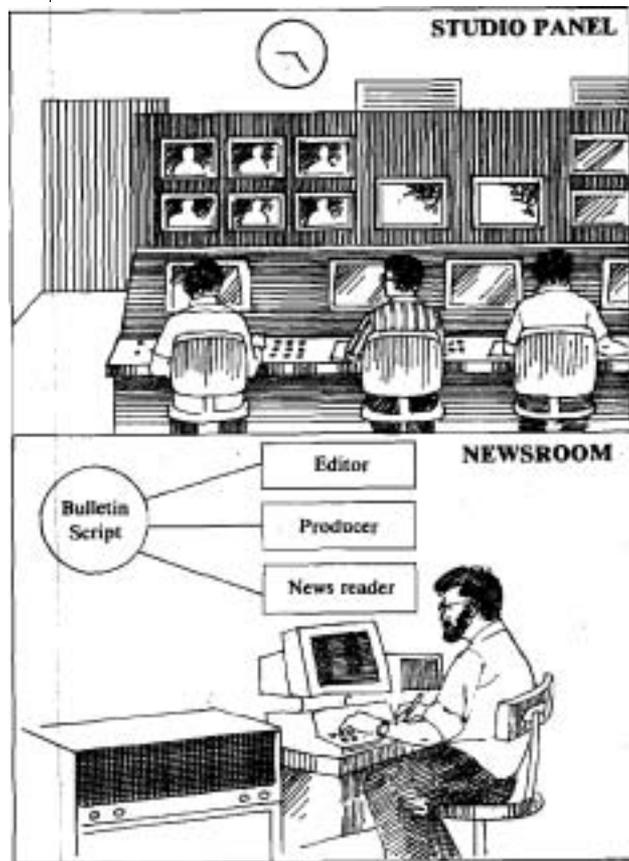
The satellite link, combined with microwavelink, has made possible availability of live **coverage** — same day coverage of news, sports and cultural events of national importance for on-the-spot or **immediate** telecast.

Global News and Programme Exchanges through satellite between Europe, US and Asia have shrunk the global village further. Events like Gulf War, cyclone in Bangladesh, assassination of **Rajiv** Gandhi, were flashed instantly and people could see **these** events sitting in their drawing rooms. That is how the frontier of Doordarshan is expanding rapidly and comprehensively.

Satellite Broadcasting has two aspects. One is uplinking of a programme from the studio end which is beamed to the geo-stationary satellite and the same is reflected through the downlink transmitters on the ground. In this way, not only more areas can be covered by satellite, but ultimately per capita expenditure for reaching out becomes much cheaper. International or interstate broadcasting sometimes needs slotting of **time** to uplink and downlink any programme. But that problem is also being overcome by a new technology by which a Light Transmission Equipment combined with **electronic** typewriter is able to transmit both video and audio signals along with ~~shots~~ that **contain/communicate** shot details **etc.** which is popularly known as **'INMARSAT TECHNOLOGY'**. For this kind of transmission one need not book satellite timing. If the particular location of transponder is known, through that small gadget, basic news items can be transmitted. Such technology came in handy, during the Gulf war.

Exercise 4

What is uplinking and downlinking of programme on satellite? How does it enrich news dissemination? What is **INSAT** multi-purpose satellite system?



(Hints to answer in 3.6)

3.2.5 Regional Service

For dissemination of primary (regional) service in each state, it is necessary that the Studio Centre at the capital is linked, either through microwave circuits or via satellite, with the transmitters operating in the state concerned. Keeping in view the microwave infrastructure available in the country, the linkages are envisaged as follows:

Satellite Linkage

- 1) Jammu & Kashmir
- 2) Rajasthan
- 3) Gujarat
- 4) Madhya Pradesh
- 5) Maharashtra
- 6) Andhra Pradesh
- 7) Orissa

- 8) Karnataka
- 9) States in the north-eastern region.

Microwave Linkage

- 1) Punjab
- 2) Haryana
- 3) Uttar Pradesh
- 4) Bihar
- 5) West Bengal
- 6) Tamil Nadu
- 7) Kerala

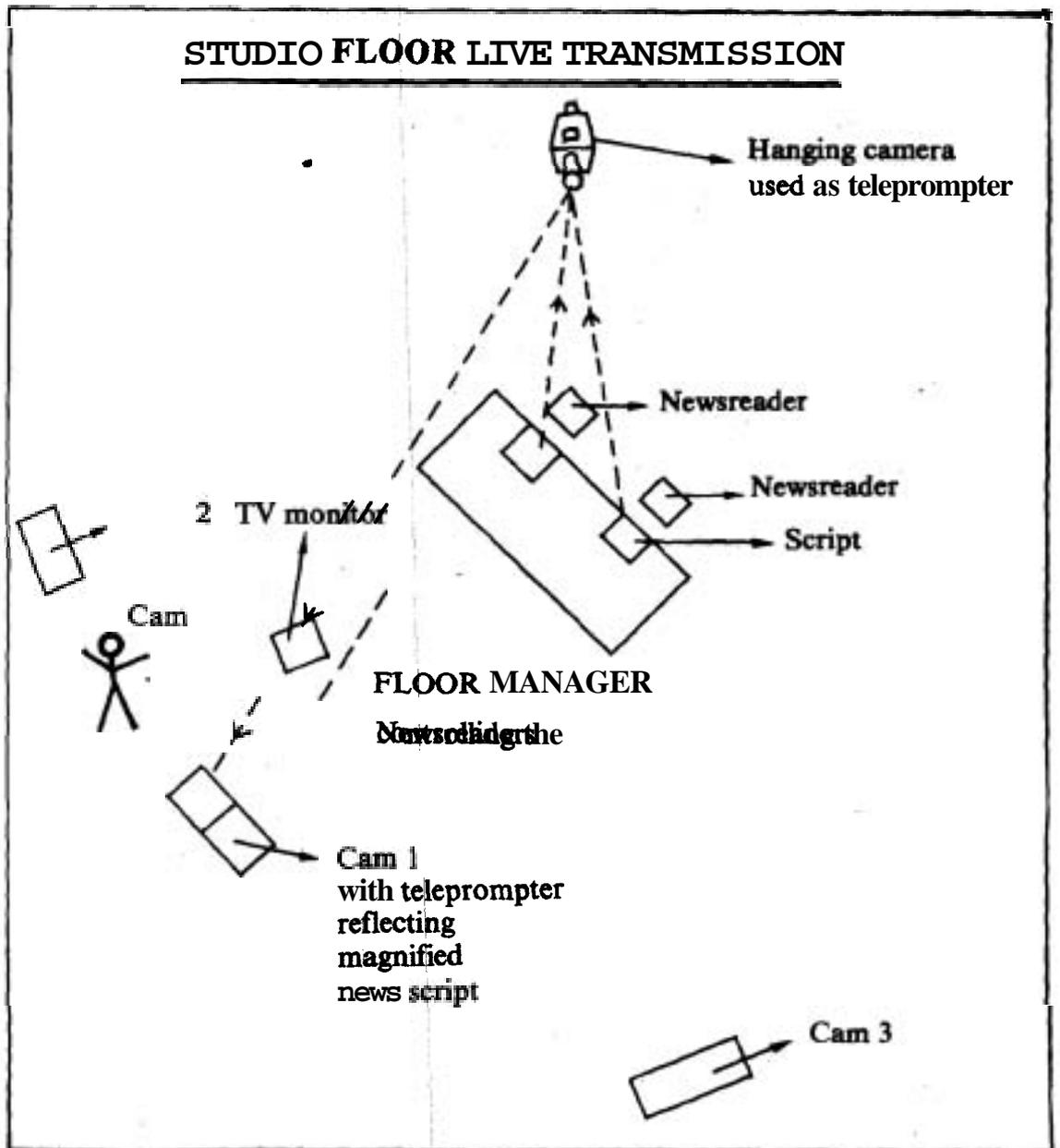
The first spacecraft under INSAT-11 series was launched in November 1991 and the second spacecraft is to be launched at the end of 1992.

This will be followed by the launch of three other satellites under the series during the period 1993-95. The overall availability of transponders for TV use under each of the INSAT-11 Series will be 12.

3.3 PRESENTING NEWS ON TV

It is dawn: the host invites you to the morning TV show.

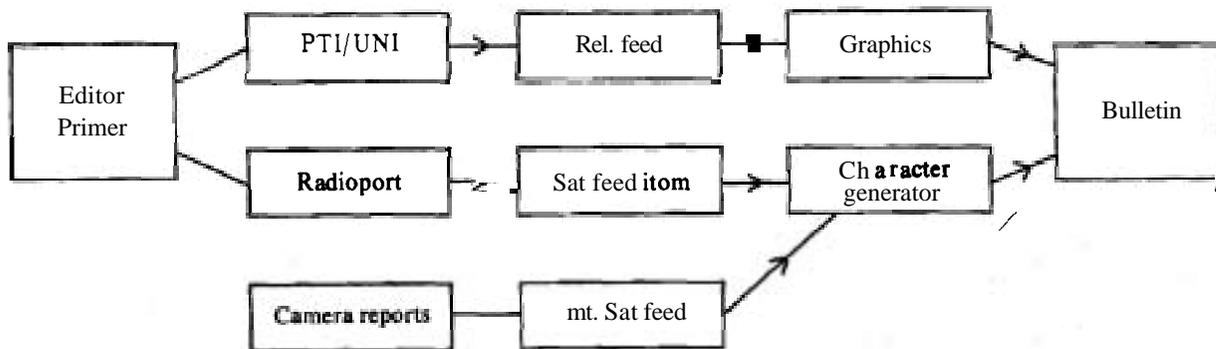
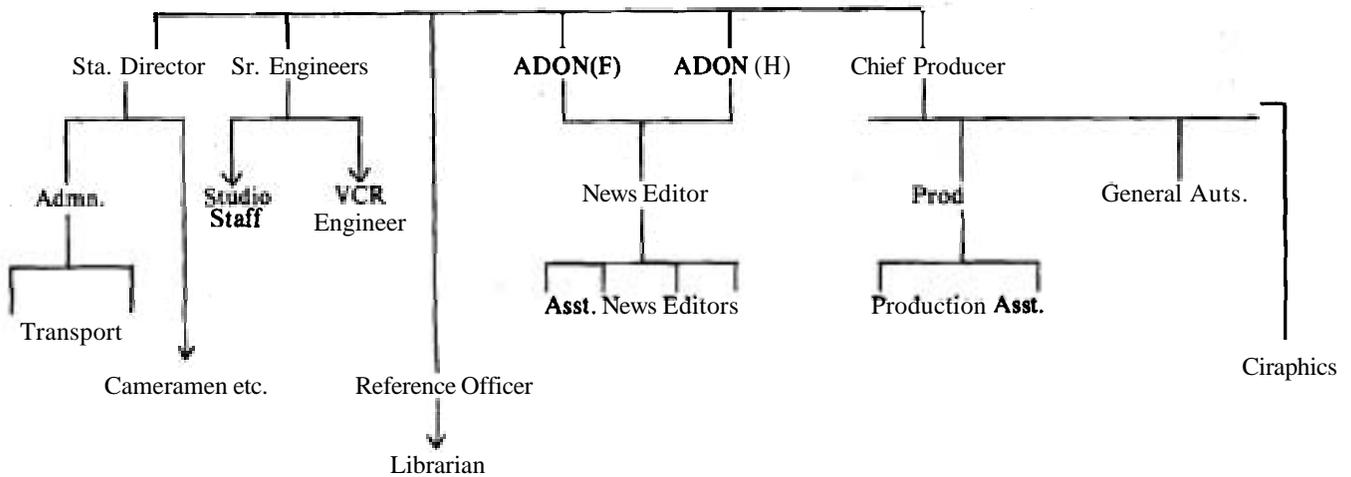
In fact, the TV Newsroom has started sifting the grain from the chaff from 3.00 a.m. in the morning. Morning visuals have come via satellite from Visnews in London to the Master Switching Room (MSR). The satellite feed contains news events from all over the globe. News Editor and News Producer have gone through the wire agency takes. And now the editing starts according to a plan of presentation. News Editor and Script Writer write the script as per the order of items and Producer edits, matching visuals with words. News reader comes. Rehearses. Goes to the studio where engineers test the light intensity, voice level etc. Producer goes to the studio panel, gives commands to cameraman, and orders the vision mixer, audio engineer to press buttons. The news is telecast.



After morning transmission, the work begins at the assignment desk. Daily coverages are scanned. Outstations are contacted. Local sources tapped. Camera units are sent with reporters to gather news. As and when those are brought, they are edited suitably, voiced and capsuled for use in the evening bulletin.

News supervisory officers take meetings periodically where they assess and review coverages, apply course corrections to reach the destination i.e. evening's major bulletins. The TV newsroom is an ever active wing of the TV Centre. It handles two hundred thousand words, and five to six hours of footage on an average daily. Now, how are these words and footage collated, related and presented to the viewers in an authentic and objective manner? What goes into the transmission and making of a news bulletin?

TV Newsroom



3.3.1 Making of a News Bulletin

1) Sources of News

Basically, there are two **sources** of television news. Broadly speaking, one is the visual source and the other is **the** non-visual source. These aspects have to be borne in mind while preparing and adapting the matter for TV. Generally speaking, the Television newsroom, which **ultimately** works for the end product, the Television news bulletin, has to have a news **gathering** system. The Television news is very different from news on print-media or radio. Television viewers always look forward to visual illustrations or audio-visual illustrations or audio-visual presentation of a news item at the earliest possible opportunity, **that** is, immediately after the happening of an event. A television news gathering network, **therefore**, is supposed to have a battery of camera-cum-sound **recording** units, which **should** be mobile and be capable of reaching the place of event within its **command** area at the shortest possible time. Therefore, a TV newsroom should be able to gather news events covered on camera.

There are other sources of gathering visual news: for example, events which are offered by different Visual News Agencies, home or foreign, which come through air service, still photographs which **are** supplied by news agencies **and** those items which are available through **satellite** communication network, offered by International Visual News Agencies. Besides these, there is another very important component which contributes to the **making** of a news bulletin, that is, the contribution of graphics and computer graphics.

2) News Gathering for Television

In addition to the manner of news gathering as explained above, different handmade or printed graphics, charts, captions, either written manually in **a stylised** manner **or** through computer **graphics**, add and enrich television news. The latest computer graphic is called 'Paint Box', which has made available a wide range of visual compositions. The **computer** graphic equipment is invariably accompanied by a camera system from which visual presentation and graphic compositions can be recalled for direct feeding into **bulletins**.

3) Collection of Visuals — Reporting on Camera

Reporting on camera is **the** ultimate in television news-gathering. Generally, alerted by news agency teleprinter or news scan **service**, TV newsroom springs into action right on the spot of the event. **Accomplished** reporters who have mastery over the medium can investigate visually-captured events by directing **cameraman** and sound engineers on the spot, conduct **interviews** and return to the newsroom to do the final editing, for visual presentation of that **news** item as per the time space given **by the** News Editor to the Reporter.

4) Satellite Communication

International and domestic satellites have opened new avenues **of** instant transmission of news events covered by **TV** journalists all over the world. In India, Post and Telegraph Microwave links provide a wide range of opportunities for dissemination of news events. Besides this, **India** is a member of the Asian News Exchange cartel known as **ASIA VISION** and it is **also** linked with international networks for which it gets news clippings from all over the **globe**, communicated or transmitted by International Visual News Agencies.

5) Nitty Gritty of TV News Production — Marrying Words with Visuals

Television news production is another area of specialised operation which deals with the final output of a news **bulletin**. In Indian situation, the News Editor, who commands a battery of script-writers, **organises** writing or scripting news as per visuals. News **Producers** have the duty of overseeing the editing of a given story, and imaginative generation of computer **graphic** composition **suiting** the words and, finally, producing a bulletin by calling shots **of** different camera and other visual sources from the panel control room within the studio. The studio floor has cameras located within it to capture the **News** Reader who has a script **before him/her along** with captions. There is a **VTR**

room that has news clips mounted on VCRs. There is MSR or Master Switching Room which makes available feeds from outstations. And finally, there is a panel control chamber from where the producer, watching the monitors, calls shots which are taken on air by him. News Producer is responsible for the transmission of a News Bulletin. Audio, video engineers work under him from the studio.

6) The News Time

News Editors, News Correspondents and News Producers represent three streams of news production besides cameraman, sound-engineers and host of technical staff. News Production is a team work activity which starts from watching of wire agency copies till the end-product as **transmitted** from the TV Studio.

3.3.2 News as Image Builders for TV

With the establishment of commercial stations in the consciousness of the audience the public stations are perceiving the private TV producers as competitors. As a direct reaction to this situation, the opinion that the **future** of the different channels depends on their entertainment offers is gaining more and more ground. Under the slogan "the programme has to be more entertaining", the public stations are preparing the displacement of their competitors. The crucial role in this is being played by news programmes. Besides, the sports coverage and the bonding of the viewer by systematically incorporating him in the programming, it is mainly the field of information programmes in which the commercial stations are challenging the public broadcasts.

Some of the privates are trying to achieve this through the assumption of the principles of the American News shows. This would mean news presentation in **understandable** terms, **even** for difficult political or economic items, a wide range of topics which still gives enough place to daily problems and global crises as well as to positive events.

Recent analysis has shown that TV news as a source for comprehensive, reliable and understandable information is crucial for maintaining that medium's lead over other current media; and that TV news will remain the most important for the image building of its mother station.

News Programmes as the flagships of television stations do not just simply mean prestige for a network, but have real financial implications. The more people watch a programme, the more money the network can **demand** from the advertisers. In India the prime time for commercials is between 9 p.m. and 9.30 p.m. — which is in between 8.40 p.m. and 9.30 p.m. news bulletins in the national network.

3.3.3 Marketing Strategies for TV News

The call for more entertainment in information programmes has created a hot debate among journalists and media researchers. The debate concentrates on the question, whether marketing models and strategies can be adapted for TV news or not. With the development of a market situation in the field of broadcasting, marketing has become unavoidable but is still a controversial topic for the public stations.

Irrespective of the competitive situation, different design elements which can be classified as entertainment, have been flowing into the news programmes ever since their beginning. So, the main question should not be "Should the news be designed more entertainingly?", but it should be the discussion on how consciously and with deliberate control, such already existing entertainment factors can be used in news programme in their most effective way. In other words, the question is no longer **whether** entertainment is admissible in news programmes, but how such elements can best be used.

News then has become a product — to put it **bluntly** — not unlike washing powder. And as with any other product in the market place, market strategies, product placement, and consumer (or in this case audience) response analysis becomes imperative.

The two elements of news — information and entertainment — must achieve a balance in the presentation. However, it is not yet clear which of the two elements attract which audience and to what extent.

3.4 PUBLIC SERVICE TELEVISION

From the very inception All India Radio and Television in India have been a product of policy perspective of the government since these two were born and grew in the government sector. The very birth of television was as an experimental Educational Broadcast in 1959. Before the great leap forward of rapid expansion of Indian Television took place, the major thrust was on the experiments related to **INSAT** programme on a **borrowed** satellite in 1976. Several serious experiments were carried out in chosen clusters of villages in the backward villages of Orissa, Andhra Pradesh, Madhya Pradesh and **Rajasthan**. It was a UNESCO programme in 1976 in which the **geo-stationary satellite** was borrowed over the Indian Ocean sky from which community sets received **beaming on** satellite signals. These programmes were on topics like health, family welfare, adult literacy, etc. After the borrowed period was over, social service programmes were **substituted** by a string of terrestrial transmitters covering the same clusters of villages. And thereafter, the classical debate is going on regarding the nature and pattern of service in the Doordarshan programmes.

Since 1982, when a national Doordarshan network came into existence and subsequently, **INSAT** satellite contributed to the expansion of the microwave-cum-satellite **system**, the increasingly sensitive viewers, of the urban and semi-urban areas particularly, have been voicing their demands for more and more entertainment. However, Public Service Programmes regarding health, agriculture, special target programmes like **youth** programmes, **have** taken a back seat. The recent wind of liberalisation and free market is bound to permeate the already existing autonomy question, and measures **are** afoot for the transition from government control to autonomy in the electronic media.

But, what is television? Can there be any television without any public control or public service? Does TV mean only entertainment which is **infact** a group of advertisers converting viewers into consumers?

The Indian Situation

Standing at the crossroads of the **socio-economic development**, while we approach the 21st century, pending the autonomy question, **the** nature of TV Broadcasting is bound to change in this country. Doordarshan is a costly affair. In the West, TV stations finance their stations themselves, going by popularity rate of programmes and the support of commercial houses. As it stands now, Indian TV is partially financed through its schemes of sponsored programmes and commercials. But, at the same time, public utility roles — News and **Current** Affairs, **Teltext** service, IGNOU Educational Broadcast, countrywide classroom run by UGC — have prominently secured a niche on the TV medium in the country. Whatever be the shape and nature of Doordarshan in the years **to** come, these roles which have already been assumed by Doordarshan have got to be catered to be a public service system.

The Prasar Bharati Act and the question of franchise stations has come up time and again. There are proposals for either one or a **consortium** of agencies which may be given competitive private **channel** to compete with the public **service** television to be represented by Prasar Bharati.

3.5 SUMMING UP

A study of this unit has helped you to learn about the potentials for adapting to TV and its production techniques. At the end of your study, you gained knowledge about:

- 1) The differences between TV medium and other medium
- 2) The distinguishing characteristics of TV medium
- 3) Satellite broadcasting
- 4) Presenting of News on TV
- 5) Television both as a cultural **proposition** and Public Service medium.

3.6 AIDS TO ANSWERS

Exercise 1

Please follow 3.2.1 and visualise it in terms of a News Reader. News Programmes as discussed in the entire 3.3.

Hints to Exercise No.2

The definition and versatility of TV and its application — whereas the newspaper has limited appeal to the literates and neoliterates, TV with its visual arms, cuts across all the barriers. The visuals on the TV make a more instant and powerful impression than the black and white print in the newspapers.

The visual images, supplementing as well as complementing the sound, on the TV makes it more effective than radio.

Hints to Exercise No. 3

- The role of TV as a medium of mass communication
- the entertaining role of Private TV
- sensationalism and catering to public taste often boil down to sheer cheap entertainment like Pay channels in the West
- the role of TV has always been looked upon, at least in the sixties or early seventies, as an effective agency for social change; Public TV particularly fits into the role
- on the other hand, commercialisation being the general order of the day, the market forces have started dictating the programme format; the Advertiser is growing as the omnipresent arbiter of **the destiny** of TV — in that context where goes the social priority of Health Education, Family Welfare, sanitation and message of literacy or even the **question** of higher education? The present scenario is therefore, of co-existence of public and private TV.

Hints to Exercise No. 4

Satellite communication is made possible by launching **geo-synchronous** satellites to enable it receive programmes sent up by transmitters, which is technically known as uplinking; and when the same signals are received by parabolic dish-antennas* for the purposes of distribution it is known as downlink.

The National TV Network in India is linked by a multipurpose satellite system known as **INSAT** series of satellites.

These satellites cater for TV networking, weather information networking and telecom services. Here we will **discuss** TV networking. The main principle of TV networking is through microwaves and satellites. In some **places** it is the combination of both. In some state capitals like Bombay, Calcutta, Madras, **Patna**, Trivandrum the microwave link receives and distributes programmes. But those state capitals which are not within microwave link, like the north-eastern states, have to receive programmes through satellite. These are then linked with microwave locally or regionally, and the same programmes are distributed around the command area.

The microwave-cum-satellite combination makes possible instant gathering and dissemination of programmes or **news** events. Say for example, visuals of games like US Open Tennis or Gulf War are gathered through electronic cameras and through mobile studios known as Outside Broadcast Vans which disseminate those images live through uplinking of audio frequencies and are received through down-link for distribution. The distribution is done either through one station, if it is an isolated one, otherwise through microwave linked chain of stations.

3.7 KEYWORDS

Cyclorama: A smooth curtain or back cloth **suspended** around the periphery of a studio

or stage.

Dope Sheet: Breakdown of instructions for shooting scenes as in a storyboard.

Geo-stationary Satellite: A satellite that orbits the earth from west to east at such a speed as to remain fixed, over a given place on the earth's equator at approximately 35,900 kms.

Special FX: Extraneous sounds or audio backgrounds created electronically.

Transponder: A combined transmitter receiver system which automatically **transmits** a signal when a **predetermined** trigger is received by it. The trigger, which is often in the form of a pulse, is called the interrogating signal.

Wire Agency Takes: **News** agencies supply news through **teleprinters/Fax** and other facilities. Teleprinter messages are provided to subscribers who are mostly Newspapers, **Radio/TV newsrooms**. The news items which keep on coming through teleprinters are tom **item** wise from the teleprinter rolls. **These** bundles of news items supplied by News Agencies are known as wire agency takes.