

TV News, reporting and Production MCM 516

Table of Contents

Page No.

Lesson 1	Creativity and idea generation for television	3
Lesson 2	Pre-requisites of a Creative Producer/Director	7
Lesson 3	Refining an idea for Production	10
Lesson 4	Concept Development	14
Lesson 5	Research and reviews	16
Lesson 6	Script Writing	18
Lesson 7	Pre-production phase	21
Lesson 8	Selection of required Content and talent	25
Lesson 9	Programme planning	29
Lesson 10	Production phase	35
Lesson 11	Camera Work	38
Lesson 12	Light and Audio	43
Lesson 13	Day of Recording/Production	52
Lesson 14	Linear editing and NLE	61
Lesson 15	Mixing and Uses of effects	64
Lesson 16	Selection of the News	69
Lesson 17	Writing of the News	72
Lesson 18	Editing of the News	75
Lesson 19	Compilation of News Bulletin	77
Lesson 20	Presentation of News Bulletin	80
Lesson 21	Making Special Bulletins	82
Lesson 22	Technical Codes, Terminology, and Production Grammar	84
Lesson 23	Types of TV Production	89
Lesson 24	Drama and Documentary	91
Lesson 25	Sources of TV News	93
Lesson 26	Functions of a Reporter	97
Lesson 27	Beats of Reporting	98
Lesson 28	Structure of News Department	99
Lesson 29	Electronic Field Production	101
Lesson 30	Live Transmissions	103
Lesson 31	Qualities of a news producer	108
Lesson 32	Duties of a news producer	111
Lesson 33	Assignment/News Editor	112
Lesson 34	Shooting a News film	114
Lesson 35	Preparation of special reports	117
Lesson 36	Interviews, <i>vox pops</i> and public opinions	121
Lesson 37	Back Ground voice and voice over	125
Lesson 38	Spoken words and relevant visuals	130
Lesson 39	Talk shows, forums and Discussion Programmes	141
Lesson 40	Functions of various departments of a TV set up	143
Lesson 41	Programmes department	146
Lesson 42	News and Current Affairs	151

Lesson 43	Coordination among Different Departments of Television 1:	155
Lesson 44	Coordination among Different Departments of Television 2	164
Lesson 45	Recap of the course	168

LESSON 01**CREATIVITY AND IDEA GENERATION FOR TELEVISION****Importance of Television among other media**

In this age of Globalization and information mass media are indispensable tools of communication and in this era of science and technology the space and time have been squeezed.

History witnessed the traditional warfare, followed by Cold warfare, Psychological warfare and then the modern warfare but in today's media warfare the words are weapons and the satellites are the artillery and due to information imperialism it's the matter of information haves and information have-nots.

Other tools of Communication

Leaflets, pamphlets, flyers, brochures, booklets, books, magazines, digests, posters, mountings, buntings, flags, banners, billboards, hoardings, radio, film, theatre.

Purposes of television

- Information
- Education
- Edification
- Acculturation
- Persuasion
- Propaganda
- Entertainment
- Amusement
- Info-tainment

Picture is the base of Television Production

Earlier the term of "Motion picture" came based on the same fact that on the screen there were "pictures in motion". Later the term was replaced by the "Film" and "Movie".

Phases in preparation of a TV programme

- Pre-production phase
- Production phase
- Post-production phase

The first stage involves the "library work" i.e. research and script writing.

The second stage involves the "leg work" i.e. field and studio work.

The third stage involves the "laboratory work" i.e. editing and mixing.

The prime job of a Producer is to:

- ❖ Generate an idea of a programme
- ❖ Presentation of the idea
- ❖ Refine that idea for production
- ❖ Develop a concept
- ❖ Decide the contents
- ❖ Engaging a researcher
- ❖ Getting the script written
- ❖ Hunting the talent i.e. actors, anchors, newscasters
- ❖ Preparing the Programme Budget Estimate
- ❖ Making the arrangements
- ❖ Coordinating with different sections
- ❖ Discussion with the set designer for indoor programmes
- ❖ Reconnaissance or survey of location for outdoor programmes
- ❖ Discussion with the cameraman
- ❖ Planning for the programme

- ❖ Casting of artists and performer
- ❖ Scheduling the recording
- ❖ Rehearsals of the participants
- ❖ Recording the programme with production crew
- ❖ Editing the programme with Editor
- ❖ Audio mixing
- ❖ Adding graphics
- ❖ Making title and promos

A good director and producer need to carry on all these steps to the best of his capabilities and to the optimum level of his efficiency. Better the programme planning and the time management, greater the quality and value of the production. The creativity will not be well on screen if the whole process is not executed properly and timely.

Video Procedures

TV Production Crew Positions

Following is a list of crew positions you could encounter in a multi-camera television production. Not all positions will be filled all of the time--smaller productions will not have some of the more specialized job duties or one person will fill several positions. Larger productions will have more specialized positions and assistants or associates to provide, well, assistance. For a detailed description of the job performed by each, see your text.

- Producer: Executive, Associate, Line, etc.
- Director: Associate, Assistant, Floor, Technical
- Writer
- Set Designer
- Makeup/Wardrobe
- Talent
- Audio Engineer
- Video Engineer
- Videotape Engineer/Operator
- Camera Operator
- Production Assistant

It is important that each person understand and perform his/her job responsibilities with maximum efficiency. Multi-camera television production is team-work, and for the team to operate effectively, it must coordinate and communicate. While the television production process may at times appear to be a confusing ballet (lyrics in Italian), there is a method to the madness. Please read and put into practice the following procedures for studio set-up and strike.

Future Trends

High Definition Television

Production

Production and transmission need not share the same technical system. In fact, as long as a production standard is readily convertible to the transmission standard, it makes a great deal of sense to use two different systems, according to many HDTV experts. For years, broadcast television has used 35mm film as its acquisition format and as a source for transfer to NTSC video for post-production and distribution. Despite the availability of HDTV production technology since the mid 1980s, 35mm film remains the premier worldwide acquisition standard for high-quality television. In fact, all the talk of HDTV may have resulted in the promotion of film as a production format. Due to all the uncertainty as to which HDTV transmission system will finally prevail, many producers feel that the safest route is still to shoot on film; they reason that they will eventually be able to transfer the film images to

whatever HDTV system wins out. Currently, the closest thing that the video community can promote as a worldwide production standard is D-1, which records both 525- and 625-line systems. The NHK 1125/60 system was being promoted as a worldwide standard with the assumption that once the material has been recorded and edited, it can be down-converted to either NTSC or PAL, or even transferred to film. And once the HDTV distribution systems have been standardized, the 1125/60 video could be converted to whatever HDTV transmission system is required. The unknown variable here is the quality and cost of the conversion.

Two glitches in the HDTV production process are still being resolved. One is constructing an imaging device that has both the resolution and the sensitivity necessary to produce an image suitable for HDTV pictures. Tubes, which were quickly replaced by CCDs in almost every other production environment, have disappeared more slowly from HDTV camera. Tubes still have an edge in resolution, and resolution is, of course, central to the whole idea of HDTV. The tubes used in some HDTV cameras were high-gain, avalanche rushing amorphous photoconductor (HARP) tubes. Unfortunately, resolution is achieved at the expense of sensitivity. The smaller the focus of the electron beam, the higher the resolution and the lower the sensitivity, thus requiring more light on the set. Especially when compared to the newer and faster 35mm film stocks, HDTV production using tube cameras required extra lighting, which in production means more fixtures and increased setup time. Another complication has involved achieving the necessary optical resolution for the lenses used with HDTV cameras. While lenses for high-quality 35mm film production have evolved to become high quality imaging tools, the history of video production has not, until HDTV, required similar performance.

Also known as advanced television (ATV), extended-definition television (EDTV), and improved-definition television (IDTV), HDTV is an improved television system with at least double the horizontal and vertical resolution, wider aspect ratio, and superior audio when compared to the current television broadcast standards, e.g., NTSC and PAL.

With approximately twice as many scan lines as current television systems, a larger screen with a wider aspect ratio, and six-channel, compact-disc-quality, surround sound, the HDTV experience will approach projected 35mm film. According to CCIR Report 801, HDTV is described as able to replicate reality when the viewer is seated three screen heights away from the display. Higher resolution, better color reproduction, separate color and luminance signals, a wider and perhaps larger screen, and life-like audio will all be combined to make the HDTV experience larger than life, especially when compared to the current NTSC system. HDTV also has professional and business applications beyond television entertainment. Some suggested applications for this new technology include; telemedicine, computer design, and teleconferencing. Yet another suggestion is that HDTV will finally make possible a concept sometimes referred to as electronic cinema. The concept is to create a network of video theaters with distribution by direct-broadcast satellite. This approach would provide an alternative to traditional film print distribution.

Major players in the race to bring HDTV to market have been the global economic superpowers: Japan, the United States, and to a lesser degree, the European community. The Japanese, who began working on HDTV in 1969, have been delivering a domestic HDTV service via their multiple sub-Nyquist sampling encoding (MUSE) system since 1991. And while the US has focused on terrestrial broadcast of HDTV signals (due to concern for local broadcasters' interests), Japan has moved ahead with DBS delivery systems. But even after several years of trial delivery, only 25,000 Hi-Vision sets were sold due to high cost.

Despite Japan's worldwide dominance in consumer electronics hardware and the US's role as the world's chief supplier of programming, the European community has been determined to be a participant in the development of HDTV standards which will impact on their electronics and broadcasting industries. The European market had been at odds with the Japan Broadcasting Corporation (NHK) system for some time due to its incompatible frame rate (1125 scan lines; 60 fields per second). Europe is on a 50 hertz, 25 frame systems with its PAL and SECAM systems. Converting from or to a 30 frame system is

both costly and a technical compromise, according to European sources. In fact, Europe's tentative development in 1987 of its own HDTV system, Eureka 95/HD-MAC, along with the International Telecommunication Union's (ITU) decision in 1986 to delay a vote on an HDTV standard, thwarted Japan's hopes for a world-wide standard.

LESSON 02**PRE-REQUISITES OF A CREATIVE PRODUCER/DIRECTOR**

A creative Producer has to present the idea and have to work till its execution for making the programme ready for the telecast.

An idea is any conception existing in the mind as the result of mental understanding, awareness or activity. It's a thought, a notion, an impression, an opinion, a point of view, a belief, a plan of action a concept developed by the mind and a theme.

A producer therefore is required to possess certain characteristics and qualities of mind and soul.

- ❖ Creative
- ❖ Innovative
- ❖ Analytical
- ❖ Logical
- ❖ Critical
- ❖ Deep observation
- ❖ Vast study
- ❖ Visualization power
- ❖ Decision power
- ❖ Sense of humour
- ❖ Sense of proportion
- ❖ Acute conclusion
- ❖ Common sense
- ❖ Aesthetic sense
- ❖ Great exposure
- ❖ Editorial judgment
- ❖ Self starter
- ❖ Initiative
- ❖ Team leader
- ❖ Forbearance
- ❖ Tolerance
- ❖ Practical experience
- ❖ General knowledge
- ❖ Courage
- ❖ Confidence
- ❖ Bravery
- ❖ Time management
- ❖ Accuracy
- ❖ Precision
- ❖ Conviction
- ❖ Consistency
- ❖ Ethics
- ❖ Communication
- ❖ Motivation
- ❖ Determination
- ❖ Patience
- ❖ Fairness in controversy
- ❖ Disinclined
- ❖ Unbiased
- ❖ Unprejudiced
- ❖ Investigative
- ❖ Informative
- ❖ Inquisitive
- ❖ Objectivity

- ❖ Subjectivity
- ❖ Technically sound
- ❖ Pleasant personality
- ❖ Command and control

Keeping in the view that a TV programme can never be anticipated good or bad as the viewer have their own choices, a producer has to prepare the programme to the utmost of one's abilities.

The audiences have many choices of channels and the variety of these television programmes give them an open chance to select the programme they want at some particular period of time.

- Selective exposure:** we use the medium we want
Selective Perception: we understand the things we like
Selective retention: we remember the content we need

Thus a producer should feel the pulse of the viewers and should design the programme in such a way that it reaches to the target audience as it is being telecast and for that there are again two factors one should bear in the mind;

Common frame of reference

Mutual field of experience

Common frame of reference is that the viewer has the understanding of the content, which is being shown on the screen as it is in their knowledge.

Mutual field of experience is that the audience can feel themselves a part of the matter they are watching in a television programme.

The programme will be successful if there are greater numbers of viewers who can relate to the programme on TV so the producer should take care of the fact that the things close to reality and the matters of our day-to-day life are of vital importance and capture more attention.

SET-UP RESPONSIBILITIES

Producer & Director

Learn to delegate responsibility. If you personally move props, cue music, or tweak lights you are wasting valuable time. The more you can put on paper prior to the day of production the less you'll have to try to remember. If the program is fully-scripted, spend time with the script and mark it carefully. Become very familiar with any pre-produced elements. If the program is not fully-scripted, study the subject matter of the show in order that you might be able to anticipate the direction and flow of the show. The more organized and prepared that you are the less chance for disorganization and confusion when those inevitable changes arise.

Assignments to your crew must be clear, oftentimes in written form, and usually distributed in the following order:

- 1) Give the floor director (FD) his/her floor plan and directions as to the set design and dressing. Usually a floor assistant(s) will be available to help with the set-up. Ideally you will have met with the FD before class, so he/she has a good idea of what you are doing.
- 2) Provide your audio engineer with his/her specially marked script and explain exactly what you want in the way of microphones, audio carts, CDs, etc. Often this can, and should, be written down to save time during production.
- 3) Provide orientation for your camera operators as to position, main subject for each camera, shot lists, etc. Give operators shot sheets if warranted. Remember; remain flexible so that changes during rehearsal can be incorporated in the final taping/broadcast. Cameras will not be ready to move into position for rehearsal until the basic set and lighting are completed.

4) Meet with your talent to firm up last minute details and to make him/her comfortable in what may be a strange environment. It is important for the FD to meet with the talent to explain what is taking place during rehearsal and what will take place during the actual production. Also, hand signals and cues must be reviewed so that the FD and talent are "communicating".

5) Provide your production assistant (PA) or graphics operator with a detailed list of graphics to be inserted and a copy of the script with graphics noted. Ideally the graphics will already be composed and stored to disk. If so, disk page numbers will be highlighted on the PA's script. Ask the PA to double check the graphic pages for accuracy--(typos, spelling, etc.)

6) Make sure that your videotape operator has any playback tapes (with cue points noted) and the record tape(s). Ask the VT operator to review the playback segments that will be used in order to gain familiarity with them.

7) Check out your technical director on any special or unusual switcher effects to be used. Routine switcher transitions should be picked up during the run through and rehearsal.

8) Review the program with your assistant director (AD) making sure that he/she understands the flow of the program and knows what time cues will be needed. Important--Make sure that you, your AD and talent all agree as to whether the time remaining cues are to end of talent, or end of show.

Confusing the Medium with the Message

As fun as all the visual effects might be to play with, you should consider all this high-tech stuff merely a tool for a greater purpose: the effective communication of ideas and information.

If that sounds a bit academic and stuffy, you might want to look at things from a broader timeline.

If you think about it, today's latest high-tech effects will look pretty lame a few years from now. (Think of the special effects in some early films.)

It's only the ideas and feelings that have a chance of enduring.

How many times have you seen a movie and forgotten about it almost as soon as you left the theater? In contrast, some movies seem to "stick with you" -- movies you may think about for days or even weeks.

In 2005, the average American spent about 1,700 hours watching television, the equivalent of 70 full days. The average U.S. home has more TV sets than people.

The medium you are learning to control can be used either to provide audiences with time-wasting, mindless, drivel or with ideas that can make a positive difference in the overall scheme of things. (And, as you may have noticed, there is a definite need in the world for people who can make a positive difference.)

How would you rather have *your* work and life remembered? These readings will add perspective and a greater understanding of television's role, impact, and responsibility.

George Lucas, one of the most revered film and video innovators of our time, has repeatedly pointed out that to be successful we must go beyond simply knowing how to do things.

It's very foolish to learn the how without the why -George Lucas, award-winning writer, producer, and director of the Star War films and a leading innovator in film and video.

LESSON 03**REFINING AN IDEA FOR PRODUCTION**

The presentation of an idea is also an art. It is necessary that what ever a creative director or producer visualize about a future programme should be presented in black and white for consideration of authorities and the organization.

Following are the ingredients for the presentation of an idea before the execution of a programme:-

Title:	Name of the programme
Type:	Form of programme
Language:	Mode of communication
Genre:	Kind of contents
Frequency:	Rate of telecast
Duration:	Length of time
Target audience:	Potential viewers
Format:	Arrangement of sequences
Theme:	Central idea

Title

The title should be representative, comprehensive and self-explanatory. It can be symbolic as well but again it ought to be meaningful.

The title is the face of the programme so it must be descriptive and expressive.

Type

The type is the kind of appearance a programme has on the screen. It can be as many types as following.

Drama

- Drama serial
- Drama series
- Soap serial
- Mini-serial
- Sit-com situational comedy
- Long play
- Tele-film
- Short film

Magazine Shows

- Talk show
- Music show
- Celebrity show
- Health show
- Commerce show
- Road show
- Game show
- Cooking show
- Beauty show

Documentary

- Historical
- Informative
- Investigative
- Docu-drama

Docu-drama

A type of drama (a film, a television show, or a play) that combines elements of documentary and drama, to some extent showing real events and to some extent using actors performing recreations of documented events.

Specific audience programming

- Religious programmes
- Women programmes
- Children programmes
- Sports programme
- News programmes
- Current affairs programmes
- Views and comments programmes
- Analytical programmes
- Opinion formation programmes

Language

International as English, Arabic, French etc

National as Urdu, Persian, Chinese

Provincial as Punjabi, Sindhi, Pashtu, Balochi

Regional as Saraiki, Hindko, Barahvi, Gujrati

Genre

Comedy

Tragedy

Action

Thriller

Adventurous

Romantic

Fiction

Historical

Epic

Science fiction

Fantasy

Frequency

Daily

Weekly

Fortnightly

Monthly

Quarterly

Biannually

Annually

Duration

3 minutes

5 minutes

10-15 minutes

25 minutes

50 minutes

90 minutes

Target audience

General public

Youth

Students

Kids/children

Women

Senior citizens

Formers/peasants

Businessmen

Industrialist

Traders

Educationist

Lawyers

Doctors

Workers

Researchers

Format

It is the arrangement of the programme and the order of the appearance of performers, artists or the participants. The producer should have the sequence of all the talent in writing so that during the recording same plan is followed.

Theme

It is the central idea of any programme, normally called the one-liner in the telecast industry. It's the plan of action on which a producer has to work to carry on any type of production.

The Three Production Phases**The Preproduction Phase**

In order for the program to be successful, you must keep in mind throughout each production phase the needs, interests, and general background of the **target audience** (the audience your production is designed to reach More on that later.

This assumes both knowledge of the prime directive and the target audience, and it ends up being a key to your personal success.

The Production Phase and, Finally, the Postproduction Phase

The production process is commonly broken down into preproduction, production, and postproduction, which some people roughly characterize as "before, during, and after."

There is a saying in TV production: "The most important phase of production is preproduction."

The importance of this is often more fully appreciated after things get pretty well messed up during a production and the production people look back and wish they had adhered to this axiom from the start.

In **preproduction** the basic ideas and approaches of the production are developed and set in motion. It is in this phase that the production can be set on a proper course or misdirected (messed up) to such an extent that no amount of time, talent, or editing expertise can save it.

During preproduction, not only are key talent and production members selected, but all the major elements are planned. Since things such as scenic design, lighting, and audio are interrelated, they must be carefully coordinated in a series of production meetings.

Once all the basic elements are in place, **rehearsals** can start.

A simple on-location segment may involve only a quick check of talent positions so that camera moves, audio, and lighting can be checked.

A complex dramatic production may require many days of rehearsals. These generally start with a **table reading** or **dry rehearsal** where the talent along with key production personnel sit around a table and read through the script. Often, script changes take place at this point.

Finally, there's a **dress rehearsal**. Here, the talent dresses in the appropriate wardrobe, and all production elements are in place. This is the final opportunity for production personnel to solve whatever production problems remain.

The **production phase** is where everything comes together (we can hope) in a kind of final performance.

Productions can be broadcast either live *or* recorded. With the exception of news shows, sports remotes, and some special-event broadcasts, productions are typically recorded for later broadcast or distribution. Recording the show or program segment provides an opportunity to fix problems by either making changes during the editing phase or stopping the recording and redoing the segment.

Tasks, such as striking (taking down) sets, dismantling and packing equipment, handling final financial obligations, and evaluating the effect of the program, are part of the **postproduction phase**.

Even though postproduction includes all of these after-the-production jobs, most people associate postproduction with editing.

As computer-controlled editing techniques and postproduction special effects have become more sophisticated, editing has gone far beyond the original concept of joining segments in a desired order. Editing is now a major focus of production creativity.

Armed with the latest digital effects, the editing phase can add much in the way of improving a production. In fact, it's pretty easy to become enthralled with the special effect capabilities of your equipment.

LESSON 04**CONCEPT DEVELOPMENT****Concept****What is a concept?**

A general notion

A conception

A comprehension

A construct

A thing formed in the mind

A directly conceived or intuited object of thought

An idea of something formed by mentally combining all its characteristics or particulars

A general idea derived or inferred from specific instance or occurrence

The concept development is next step; a producer has to take after generation of an idea and before its execution.

Before we take concept in the scenario of production, let's discuss the concept in mass media research perspective.

A concept is a notion about a natural phenomenon. For example "mass" is a concept having different notions to different people. To a scientist mass is a term for the physical appearance of a matter but to a social scientist mass is general public. So is the apprehension about the term "medium" to a layman it is about the size but to a media person it is the channel and tool of communication.

Construct

A construct is the combination of two concepts. For example "Mass" is a concept, "Media" is again a concept and the "Mass Media" is a construct which give a third meaning as a whole phrase. These concepts in researched studies are measure as variables.

Variable

It is the changing value of quantity or quality of a thing or concept is called variable. As the term itself defines it is "able to vary". We come across different variable in our studies. Variable are used in scientific as well as social sciences research.

In case of traveling it is a common observation that "more the speed, greater the distance" or in another example "frequent media use socializes the audience. In any phenomenon under study there have to be two variables at least.

Independent variable

It is the variable whose value is independent to change and normally it is denoted by "x" and is placed horizontally on the graph with its negative values on the opposite side if required. For example "speed" is an independent variable. Media exposure may be the other example.

Dependent variable

It is the variable whose value is dependent to change and normally it is denoted by "y" and is placed vertically on the graph with its negative values on the opposite side if required. For example "distance" is a dependent variable. Socialization from media may be the other example. A dependent variable is dependent on the independent variable.

Intervening variable

It is the variable that effects the relation of the independent and dependent variable. For example in "quality of the road" is an intervening variable. Tune-in time may be the other example.

Extraneous variable

It is the variable, which does not directly influence the relation of independent and dependent variable. It is not as pertinent as an intervening variable. For example “the traffic conditions” is an extraneous variable. Attention of the viewer may be the other example in relation to the above-mentioned cases.

Types of research

Pure and applied research is Scientific or laboratory research.

Descriptive research is Social or library research.

Qualitative research deals with the qualitative variables

Quantitative research deals with the quantitative variables

Research is the base of any programme especially in Talk show and documentaries. Interviewing the right persons after they have been identified as able persons who are in knowledge of an event, gives a producer great deal of satisfaction and sense of perfection in the post-production phase.

LESSON 05**RESEARCH AND REVIEWS**

For any of the programme produced for the television research is of vital importance as it makes the production factually sound and technically sound.

What is research?

Research is constant navigation to know the truth.

Research is continuous effort to dig out facts.

Research is an endeavour to find something new.

Research is making new interpretation of existing knowledge.

Research is an addition to already present knowledge.

According to a mass media research expert Kerlinger, “It is systematic, controlled, critical and empirical investigation of hypothetical propositions about presumed relations among natural phenomena.”

Research Procedure

Selection of a problem

Research question

Making hypothesis

Review of available literature

Experimental design

Research suppliers

Data collection

Analysis and interpretation of data

Presentation of research

Replication

Selection of a topic

It is to select the topic on which the research is to be conducted. This is very important, as it's the foundation of the whole research procedure. A researcher has to be very cautious and keen while selecting a topic for study, there are certain questions one must keep in mind before the conduct of research.

- Is topic too broad?
- Are the data susceptible to analysis?
- Can the results of the study be generalized?
- Will the study cause any harm to the subjects?

Review of available literature

Before we start a research study we need to review all kind of literature available to us so that our research may not be duplication of already existing study. It is always better to review the literature present following forms.

- Books
- Newspapers
- Magazines
- Archives
- Encyclopedias
- Research journals
- Educational studies
- Findings by research institutes

Statement of problem

Next step of research is to state the problem under study. The topic of research contains the issue but here we elaborate the problem in form of a statement.

Research question

After stating the problem the research question is formulated so that variables in the researched can be easily defined and then studied.

Making hypothesis

Hypothesis is the supposition made in anticipation as what may be the result of a particular study. It's the assumption made in advance and normally there are more than one hypothesis formed the first and basic hypothesis is called "Null hypothesis" and is denoted by "H₀" while the substitute hypothesis is called "alternative hypothesis" and is denoted by "H₁".

Experimental design

Design in research means the plan of action a researcher will follow in due course of research. It is the type of the research to be used in study, may it be survey research or content analysis.

Research suppliers

These are the persons through whom the data is collected on certain topic. They may be students, institutes or employ of any organization that are to provide the responses of general public to the questions of research.

Data collection

Data collection is the next step in research procedure as at this stage data is collected directly from the audience or indirectly through the research suppliers.

Analysis and interpretation of data

The data gathered is then analyzed by different techniques and finally interpreted in form of tables, graphs (pi graph, bar graph, line graph) and notes.

Presentation of research

Once the research study is finalized, the results are presented in form of a thesis or dissertation for the publication of research.

Replication

Replication is reproduction or duplication of a research study in case the desired results are not being achieved from the null hypothesis and the researcher has to resort to the alternative hypothesis.

Research in television production

The research procedure properly followed can give a good and authentic outcome. Research based documentation for production is very exciting, one can create a difference, doing the impossible.

A good producer has to have knack of finding out related facts from just one single fact one has been told. It's like seeing the ice berg tip while the bulk is under the water.

In television production research is mostly used in following areas.

- Documentary
- Travelogue
- Historical play
- Docu-drama
- Talk show
- Current affairs

LESSON 06**SCRIPT WRITING**

The script writing is an important step in the production of any television programme and the producer should choose such an author having the knowledge of writing a screenplay. The subjects for the TV production should be one not treated in book. The writer should have the mental images built on remembrance of scenes and experience that help to visualize and create the scenery. He or she must have “eye of mind” and be capable of making mental pictures.

The plot of any story, drama, novel, or play has following basic ingredients

Introduction: beginning
Complication: development of complications
Culmination: climax of conflict
Solution: resolution of issues
Conclusion: ending

The writer should keep in mind that the characters must be intensely human, close to real life and day-to-day situations. More universal the theme, greater is the audience. A good author has a study of lives of those who will be the audience so he or she should develop the ability to write dialogue by listening to the conversation of those particular people.

A good script has following components:

Purpose to justify its viewer-ship
Simplicity to make it look true
Familiarity to be directly communicable

The situations in the play should be easily assimilated and there must not be any loophole in the story. The conflict and then the resolution, setting the problem, explanation of factors involved all should be weaved properly. There are as many stories as many of persons, where you find a human being, and you find a drama there.

Elements of a successful story

Extraordinary swiftness
 Economy of words
 Rapid development of situation
 Promise of future development
 Immediate attention
 Powerful atmosphere
 Striking characterization
 Intriguing unusual setting
 Extremely usual setting

Do's in script writing

Opening should be catchy to hold the audience
 The style, diction and contents should introduce the play
 Logical development of the story is necessary
 Tempo to be fast
 Planned forward action
 Element of suspense is vital.
 Surprise grabs the attention.
 Language should be used according to situation and story.
 Definite ending is a must for a story.

All problems to be solved in the end
All characters accounted for what they have done.
A tragic or unhappy ending may be satisfactory if a moral can be deduced.
Policy matters to be dealt carefully.

Don'ts in script writing

Profanity and blasphemy
Vulgarity and obscenity
Belittling of any race or caste
Criticism on any religion or sect
Physical deformities not to be made humorous
Crime, murder and suicide to be discouraged
Degrading any colour or creed
Use of poor grammar
Offending humour
Offensive statements
Too talky script
Unintentional interruption to be avoided
Words with multiple meanings to be shunned

Characters

The writer of the script must also make each actor act in the way as the characters, are supposed to act in real life and in the dialogues emotions must be brought to the viewers. They should speak in clearness and directness.

Actor-proof script

The television script should be an “actor-proof” script, as it should be written in such a way that it can not be misinterpreted by the performers so the sentences are good to be short, crisp, clear and simple.

Effects

The effects are the moods, emotions, gestures, original sound, music, whispers, exclamations and questions.

Length

The story should be timed exactly and tempo must be maintained. Rehearsals are the source to measure time and it can be increased or decreased accordingly.

Manuscript

The script should be legible and double-spaced with margins on sides. The characters, names, ages, type of personality, place and location should be all well defined.

Submitting the manuscript

It should be well in time for the approval of the authorities in the organization or a television channel.

Script Paper

Traditionally, television scripts are prepared using a 2-column format with video descriptions on the left side of the page, and audio on the right. Depending on the format of the program; news, interview, etc., the audio portion will vary from fully-scripted (every word spoken is written on the script), to semi-scripted, or even an audio outline.

Camera Shot Sheet

Camera shot sheets are prepared from the finished script and are simply a breakdown for each camera position, listing each camera's shots in order as they appear in the script. For instance, for a 4-camera studio shoot you would generate four shot sheets--one for each camera.

Editing Log

The editing log is an essential part of preparation for post-production. Before you can begin to edit video, you must have a clear understanding of the video and audio contained on your source videotapes. Rather than watch and listen to your videotape and then attempt to recall from memory, the editing log sheet allows you to jot down in and out points of all of your visual and auditory material, making notes as to the usefulness of individual shots or sound bites. The use of SMPTE time code makes editing logs all the more effective. Since time code is an absolute frame reference, all references to in or out points is an absolutely reliable reference for finding that material again once you begin editing. S-VHS tapes recorded in either of our camcorders or in our record VTR will be recorded with time code. Both the playback VTR (AG-7650) and record VTR (AG-7750) will read time code or control track. For logging at home, a VHS copy of your S-VHS source tapes can be made with a visual time code readout on screen. Using this VHS window dub allows you to log your tapes, with the accuracy provided by time code; in the comfort of your own living room (I love this business!).

Storyboard

The storyboard is a visual, shot-by-shot depiction of your project. Critical frames are sketched, much like a comic strip, so that others (clients, crew, and financiers) can share, and hopefully approve, your vision. Storyboards are commonly used for spot advertisements, promotional spots, and movies. I've also included a "photo-board". This is created after-the-fact from actual frames from the project. In this case it is not used for pre-production but rather for promotion after the project has been completed.

Fax Request

This has nothing to do with facsimile machines. The fax request is a form used to request facilities (fax) for television production. Fax requests at TV are forwarded to the production manager and chief engineer for approval. Once the fax request has been approved, you know that the studio, control room and/or equipment requested are available for your use at the day and time requested. Although first-come, first-serve is SOP, critical projects may bump others deemed to be less important.

Equipment Reservation Form

The equipment reservation form is used to reserve location gear (camcorder, lighting, tripod, etc.) and editing suite time. It is simply a more streamlined fax request that requires that you answer a few questions about your progress to date on the project under production.

LESSON 07**PRE-PRODUCTION PHASE**

The pre-production phase is an important and the foremost stage for any production as it's the foundation of the programme being produced, whether its news or entertainment programme.

The director infuses in to the script, certain liveliness and life like quality through the means of scenes. He or she is the final judge in the matter of conflict. Characterization, motivation and technique are the elements, which polish a production.

(There are two kinds of productions technically and both require different prerequisites in pre-production phase.

- **Indoor production**
- **Outdoor production**

Director as producer

The Director is called Producer in TV production as s/he handles the financial matters along with all other issues regarding programme. For any indoor or outdoor production the first thing is to prepare a budget.)

There are certain things a Producer has to plan before any production, which include:

Talent

Talent means any person participating in the production directly or indirectly other than the technical staff of the organization. It can be researcher, scriptwriter, comparer, anchorperson, newsreader, newscaster or the actors and artists in case of drama production. Talent fee for all is to be mentioned in Programme Budget Estimate.

Electronic News Gathering (ENG)

It's the term used for the technical production facilities required for outdoor productions. It's the camera crew including a cameraman, an audio engineer and a light man.

Characters or performers

These may include the entire artists who have to appear on screen in any capacity as compair, anchorperson, newsreader, newscaster or the actors.

Storyboard

It is the outline of the production and in it the director decides the plan of action, how the shooting is to be done and design on what grounds the recording will be carried on.

Outdoor Production

For each Outdoor Production, reconnaissance is necessary as you are going to a remote location from the studios. It includes:

Reconnaissance

It's the survey for the location in case of outdoor productions. The director along with the camera man goes to the particular location foe spot inspection and plans the placement of camera, shooting angles and other matters regarding recording.

Traveling expanses

In case of outdoor productions the director has to mention the traveling expanses to be incurred on the programme on the transportation, accommodation of the technical staff and the artists.

Unforeseen expenditures

The producer should also have the surplus budget for any unexpected expenditure, if it comes across during the course of production.

Programme Budget Proposal (PBP)

The Programme Budget proposal for each episode is always sent before any recording, as it includes the payments of the different talents in the programme so that the Accounts department prepares the cheques respectively, well in time.

Programme Budget Estimate (PBE)

Preparation of the Programme Budget Estimate is also the duty of a producer as other than the directorial function the producer has to manage the finances of the production on behalf of the organization or the channel, he or she is working for. In this whole cost of direct or indirect expenditures are mentioned for the approval from the finance department. PBE is made for a complete quarter that is of thirteen weeks and all expected expanses are catered in it.

Essentials of PBE

- Talent fee
- Script fee
- Research fee
- Transportation
- Logistics
- Accommodation
- Unforeseen expanses

Indoor Production

The requirements for indoor productions are different than that of outdoor productions, it include:

Set designing

The director has to sit together with the designer to discuss the set to be erected in the studio for the recording of any programme.

Properties

The items to be used on a set are called properties or “props” in short form, these include, furniture, decoration pieces, room accessories and other domestic items of daily utility.

The staff that matters in production

- Set designer
- Lighting director
- Cameraman
- Editor
- Director

The director should aim at audience;

To develop dislike for what is unfair and untrue

To develop disgust for which is cheap and substandard

To develop indifference for which is trivial and meaningless

To develop enthusiasm for what is fine true and important

The director for oneself should develop the habit of;

- Self-control
- Self-respect
- Self-reliance

A good director should coach his cast and train himself. The purpose of a director in the final production is to create for the audience, the same emotional feeling, he or she had while reading the script. Every programme has a mood and an emotional experience to present. The audience should be attracted by all those things, which build up mind, body and soul.

Spoken words are the inflammatory things. Human voice is the most potent conveyer of emotions. Language is an instrument that appeals to imagination of human being.

Knowledge of music is another asset for a director as music is identification of a play or a character. It bridges from locale to locale, time to time and mood to mood.

Studying the script**While studying a script a director should:**

Digest the script to get the real mood and feeling
See that the script is approximately of right length
Suggest small changes if required to better the performance
Hear the whole script, as one reading is not enough

As far as the script is concerned, one reading is never sufficient and a director and producer should hear the whole script as well from the writer.

First reading is silent to conceive, what the script says. It helps the director to understand the sequences of the story and to make the storyboard.

Second reading is to make the notes, writing the ideas in to the margins, checking the positions of actors in relation to camera, placement of microphones, and adjustment of lights on performers.

Third reading is to read with the mind focused on the actors who are to portray the different parts, deciding on the type of expression, physical traits, gestures and body language.

Moreover, survey for the location in case of outdoor recording and set designing for indoor recordings are also two major factors to be considered in pre-production phase. Properties on the sets, wardrobe, dresses and costumes of the artists, their make-up and get-up are also the elements to be considered well at pre-production stage.

Once the director is finished with all above-mentioned matters then comes the next step that is casting.

A Few Words about Directing

Directing live television can be either a great adrenaline kick or a major frustration--the key is your organization and communication. We've already addressed organization, so let's spend a moment on communication.

The first rule of communication for live TV is to be precise and concise. But first you'll have to master the lingo that directors use. Be warned that the lingo can and will change from market (city) to market, station to station. But one thing is fairly consistent. Always give a ready cue before giving the cue to execute the command. This allows your crew to prepare to do what you want them to do, and then when you call for the command to be executed, the crew can respond immediately.

For example:

- Ready Cam 1..... Take Cam 1
- Ready to Roll VT..... Roll VT
- Ready to Cue Host..... Cue Host
- Ready with Name Super..... Name In, Name Out, etc.

In each case since the crew has been prepared with the ready command, they can execute the take command at the instant the director says, "Take, Roll, Cue, etc." As you may surmise, the ready cue becomes worthless if the director changes his/her mind, e.g. I've heard directors say, "Ready Cam 2, Take 3..." and in these cases only a really good TD can save the director's hide.

And finally, learn to watch your monitors. You can see a lot about what's going on in the studio and VT room simply by looking at your monitors. Often you can see a problem before it gets to air and still have time to do something to correct it. And look at your camera shots before you put them "on-line". Is the framing right, can it be improved slightly by asking the camera operator to adjust the framing a bit? You are the director, and the look of the program is your responsibility.

The Assistant Director

The role of the Assistant Director (AD) is crucial to the smooth operation of the control room. Live television is a matter of split-second timing and the AD is the crew member responsible for informing the crew of time used and time remaining. The two most important crew members to be informed of time cues are the Director and the Floor Director (FD).

The AD begins by counting the crew into the show, i.e. announcing the time remaining to air. This may begin as early as 30 minutes before airtime, depending on the complexity of the show, and continues right up until the 10 second countdown. For the sake of in-class projects (beginning with project #2) the

AD will give time remaining cues beginning at 3 minutes to air and as follows:

3 minutes to air
2 minutes to air
1 minute to air
30 seconds to air
15 seconds to air
10, 9, 8, 7, 6, 5...

Once into the program the AD continues to give time cues over the intercom for the benefit of the Director and FD. These time cues should announce the number of whole minutes remaining, down to the last minute, and then every 15 seconds, with the final 10 second counted down to black. Be sure to give time cues with enough vocal authority to be heard over the normal din of control room chatter.

In addition to time remaining in program, the AD may be requested to time individual segments such as VT clips and commercial breaks. For this reason it is sometimes necessary to have a stopwatch in addition to the master count-down clock. That way the stopwatch can be used to time individual segments while the master count-down clock can remain dedicated to showing the time remaining in the program.

At some networks and stations the AD rolls VT clips and sets up camera shots. However, not all directors like the idea of giving up control of these crucial tasks. So be sure to discuss with your director exactly what he/she expects of you as AD.

LESSON 08**SELECTION OF REQUIRED CONTENT AND TALENT**

After finalizing an idea, making the budget, getting the script, studying rather digesting it, next comes the casting for the programme and we all know that talent hunt is a difficult job as to find the right person for the right job is always challenging.

The producer has to be very keen at the stage of casting because the good acting or performance removes, from the minds of audience any remoteness and must cause them to perceive living personalities enacting a portion of life.

The performance of any actor must give the character meaning so the actor or artist must be accurately chosen.

A poor cast can ruin a very good script and a poor script may sometimes be made into a fairly decent show with carefully chosen performers, artistically blended.

The casting committee is concerned of two things:

What comes out at the screen?

What happens in the minds of viewer?

In the television either public or private sector productions now a days there are only contract actors are available, although there are staff artists in radio. A producer can choose from existing artists, or if he/she has time so auditions can be arranged for the fresh faces and new talent.

If a dramatic director does not know his potential coast, it is wise for one to hold auditions or tryouts. He/she will carefully select the artists as per characters, keeping in mind, the audition may play their part in casting a play, they are never wholly satisfactory because; Actors never feels that he/she has done the best and

Director never knows what an actor can do until he/she has seen them in a play or performance.

It is best to cast an artist by watching him/her on screen with proper make-up, makeover and getup with original lines and dialogues.

The director watches following things for the flexibility of performance

Displaying an understanding of lines

Varying speed according to material

Expressing emotions without shouting

Giving expressions, stresses and pauses

Throwing cue lines to co-artists

Delivering the dialogue in true spirit

In casting it is best to watch the talent on screen or monitor not in studio or the office unless he knows his artist very well, he should try many. The actor should not read the script merely; they should deliver the dialogues as emotions full of expressions.

Having decided upon the selection of the artists, the producer should fix the time of rehearsals, which include:

- Simple rehearsal
- Dry rehearsal
- Camera rehearsal
- Full rehearsal
- Final rehearsal

It is good to distribute a copy of script to each performer, if they retain it they can thoroughly familiarize with the characters they are to portray and also gain an idea of the whole drama, knowing the show well. The artist will be able to give more intelligent reading of their lines and thus time will be saved in rehearsals.

Since a producer has to work against time, each bit of time saved is valuable to him and to the channel or organization he is working for.

Each actor underlines the character whose part he takes, each time it appears and if the speech is carried over the next page, “more” is written at the bottom of the page, however every effort should be made by the writer or the script typist to complete it within the page and next lines be written on next pages.

First rehearsal is generally quite informal, merely reading the script without the microphone or the camera. The director explains his idea of the script and tells the cast the effect he wishes to create. The director should encourage the artist to interpret the part he or she has been assigned. He will guide the actors but avoid dictating them the characterization. He gives the cast the picture as he desires it and places them the responsibility of the achievement.

Dry rehearsal is in the studio, on the set or location with the talk back microphones, signals by the floor manager and director makes further suggestions about the characterization, interpretation, pronunciation and enunciation.

Camera rehearsal is for the placement and movement of cameras and all the instruments and apparatus in place. Members of the play or show know their parts and duties.

Time management is also done in rehearsals. For ease a director can keep stopwatch to measure the pace and tempo.

Final rehearsal is one before the recording but prior to that a director has fairly accurate timing of the programme and he knows which part can be eliminated with out loss to the performance and story, so the director can time each page of the script, writing down the exact time at the bottom of each page. The detailed timing is necessary for the perfect control of the time element while the programme is being recorded.

It is good idea to cut a script down for required number of rehearsals and many factors enter in to determination of answers;

- The script itself
- The ability of the artists
- The amount of time
- The degree of difficulty
- The efficiency of director

No good director will stop rehearsing until he/she is certain that his show reached the highest degree of perfection.

Run Through:

Begin a run through of your shots as soon as talent and cameras can get into position. Check all your shots in the order that they appear in the program. Do this first run through in the studio, as you watch the studio monitor. Any changes can be noted by your assistant director and incorporated into the first rehearsal in the control room.

First Rehearsal:

Move into the control room and do your first full rehearsal from there, utilizing camera changes and other notes that your AD took down during the run through. This will be your first opportunity to time your production; so conduct a full rehearsal--do not stop for each and every mistake. Your AD can make note of changes to be made before the next rehearsal.

Second Rehearsal:

If you planned properly, your second rehearsal should go smoothly and should be videotaped just in case this one is a "save". If the taping turns out well, consider this your final take. If it still needs some fine tuning, go on to the final taping.

Talent: make sure they understand the order of the pgm, make them feel at ease.

Suggestion: Make a check list of all the details that need to be attended to at various times, i.e. the day before, at setup and rehearsal, and just before rolling tape for the production. Attention to detail and planning for the unexpected will save you from most disasters. Providing each crew member with a detailed list of all that is expected from him/her will not only demonstrate your desire for 100% from that crew member, but it should also make for a smoother production and taping.

Forms

Forms, who needs them? For a medium which depends so heavily on images and sounds, you'll soon find that there is a lot of emphasis on print--specifically forms to organize your thinking and working. There seems to be a form for every occasion. From talent releases, to script paper and storyboards, to FAX requests.

I know what you're already thinking:

You're told that forms must be filled out, but you have a sneaky suspicion that nobody will ever read them.

Forms slow you down. In the time that it takes to get through the paperwork, you could have completed the project.

While there may be grains of truth in the above sentiments, reality is that forms are necessary for efficient communication, teamwork, and for the organization of your thoughts and work. They force you to plan more carefully, to consider other options, and to approach the task more logically.

While forms will change over time and from city to city, market to market, get used to them because you'll be seeing some variation of them for as long as you're in the biz!

NOTE: Blank forms will be provided for your use. Please photocopy them before using and retain the master, working only from your copies.

Talent Release Form

The talent release (sometimes called consent and release) form is a legal document that once signed gives the television station or production company the right or permission to use the name, voice, and/or picture of the person signing the form. A properly signed form prohibits the signer from later stopping the broadcaster/producer from using the material, or from suing the same for its use. Following is a fairly generic example of a talent release form. One thing that should be noted--the more general the form the more likely that one form can be used for multiple applications. However, the more specific the form the more likely that it will hold up in court if challenged.

Talent Release Form

Talent Name: _____ (please print)

Project Title: _____

For value received and without further consideration, I hereby consent to the use of all photographs, videotapes or film, taken of me and/or recordings made of my voice and/or written extractions, in whole or in part, of such recordings or musical performance

On _____ 19 ____

(Month) (Day) (Year)

by _____, representing (insert production company/station here) and/or others with its consent, for the purposes of illustration, advertising, or publication in any manner.

Talent Name _____ (signature)

Address: _____

Date: ____/____/____

If the subject is a minor under the laws of the state where modeling, acting, or performing is done:

Guardian: _____ (please print)

Guardian: _____ (signature)

Address: _____

Date: ____/____/____

LESSON 09**PROGRAMME PLANNING**

The planning of a programme in pre-production is very important to avoid any unpleasant situation and untoward event as sometimes it may happen that unforeseen problem occurs so better the planning, greater the quality. Every channel or TV station has a planning section or department to facilitate the producers. Each producer before programme meets the planning officer to discuss the requirements for the production.

Outdoor Production

During the outdoor production, mostly single camera is used in news coverage, media briefings or even drama and documentary programmes. For the purpose an Electronic News Gathering (ENG) and a producer has to requisite a recording shift.

Checklist

- Camera
- Neck microphone
- Hand microphone
- Cable microphone
- Cordless microphone
- Baby light
- Kit light
- Sun gun
- Monitor
- Reflector
- Tapes
- Battery charger
- Transport
- Make up
- Costumes
- Confirmation of participants
- Location management
- For outstation recordings
- Tour authorization
- Accommodation
- Boarding and lodging

Technical staff required

- Director
- Cameraman
- Light man
- Boom operator
- Driver

Indoor Production

For the indoor production, mostly three cameras are used in Talk shows, current affairs discussions and drama programmes. For the purpose complete studio is engaged and a producer has to requisite a recording shift.

Checklist

- Studio requisition
- Three Cameras
- Neck microphone
- Hand microphone

Cable microphone
Cordless microphone
Set installed
Lighting
Panel/switcher
Camera control unit
Audio console
Cassette Recorders
Cassette Players
Functional Monitors
Tapes
Make up
Properties
Wardrobe
Costumes
Confirmation of participants
Gate passes

Technical staff required

Director
Cameramen
Lighting director
Light men
Boom operator
Camera Control Unit (CCU) engineer
Audio engineer
Recording Engineer
Set designer
Studio hands
Studio hands
Floor managers

Points to ponder

For different programmes the planning is different so a producer should manage likewise so that the production process may not suffer

Outdoor broadcast

For this purpose OB van is used which has the provision of panel, switcher, camera control unit, audio console, Cassette recorders, Cassette players. The OB van provides a director all the technical facilities of studios out side the studio.

Electronic Field Production (EFP)

As the Outdoor Broadcast van is used and the cameras are patched that is those are giving the output to panel directly, such kind of makeshift studio environment in outdoors is called EFP.

Talk shows

For the talk shows, we require microphones for each participant and a cordless hand microphone is preferred if the programme has the audience participation as well. The distribution of invitation cards is also done in advance to fill the talk so with life. If there is any report or package to be shown so the set should have the provision of a plasma screen also.

Live coverage

For the live coverage like some national event, some special show the arrangements are on broader scale.

Music show or concert

For such shows heavy lights, floodlights, and colourful lights are used to create dramatic effects. Crane and jib are also frequently in use in these shows.

Mega shows

For telethons, marathon transmissions, many shifts of staff as well as participants are required so the director should plan it well.

Award ceremonies

All the channels and media organizations hold their award ceremonies and a lot of in house staff and artist are invited which involves a lot of boarding and lodging.

Sports events

The events like marathon, horse races, cricket matches, football, hockey, basketball, tennis and other games are multiple camera production so the planning is to cater all the production.

Approval of authority for the venue

When a TV channel is organizing or holding a programme in a certain location, the approval of the relevant authority for the venue must be sought.

Security management

As the installation of Television are expensive and sensitive as well so proper security measures are necessary.

Refreshment of artists and staff

Many programme are of longer duration so the arrangements for the food and beverages are also to be catered in coordination with the administration department.

Continuities

The assistant director is responsible to keep a track of different continuities.

- **Continuity of dialogue**
- **Continuity of Situation**
- **Continuity of dress**
- **Continuity of makeup**

Assistant Director

As an Assistant director (AD), you are the second eyes and ears for the director. During the run through and rehearsals you will be at the side of the director making any notations re script changes and timing. Once inside the control room you may be expected to perform various task, probably the most important being keeping track of timing and giving timing cues to the studio and control room crew. In addition to timing, ADs are sometimes asked to assist the director by watching the monitors for framing, setting up the next shot, calling for videotape segments to roll in, calling graphic supers in and out, etc. It is important that the AD become familiar with the operation of the countdown clock and stopwatch.

Floor Director

He or she reports to the Producer/Director for instructions regarding the set and set dressing. With the help of floor assistants, set-up and dress the set as instructed. Make certain that you introduce yourself to the talent and call them by name when addressing them. Review the hand signals that you will be using with the talent. Make sure that talent is comfortable and understands what is going on. You'll be

on PL (intercom) this whole time--be sure to listen for the voice of the director and respond quickly to his/her directions.

As floor director, you are the most important crew member in the studio and you must understand the production nearly as well as the director. Be careful to delegate set-up responsibilities to your assistants and make sure that the talent is as comfortable and relaxed as possible. If there is a break in the taping, all of the crew on headsets will know what is going on, but you must remember to let the talent know what is going on.

Audio Engineer

Obtain your marked script from the producer/director. Note the audio elements specified by the script and gather the necessary microphones and accessories. When laying microphone cables, camera movement and placement should be considered. Cables should be positioned so that they are out of sight of the cameras.

Ideally you are responsible for miking talent; however this may be delegated to the FD if necessary. Be sure that microphones and cables are hidden.

Next, move to the audio control room and test the microphones to make absolutely sure that they are working properly. Mark the audio console's channels for talent's name and the approximate level for each microphone. The FD can assist you with this by having each talent speak in turn. Be sure that they are speaking at a level representative of their real performance. Next, check out the other audio sources that you will be using. Audio carts must be checked for level and to ensure that they are cued. CDs should be previewed for level and to become familiar with the cut to be used.

Camera Operators

Get your shot sheets (if they are being used) from the director and attach them to the back of the camera. Make sure that you have sufficient cable to reach the furthestmost position you will occupy. Uncap the lens (after you have obtained permission from the video operator) and set your filter wheel to the proper setting. For studio work it should be set to 3200 K to match the studio lights. Adjust the viewfinders (VF) brightness and contrast controls for optimum picture on your monitor. Unlock the pan and tilt locks and adjust the pan and tilt friction (drag) adjustments to suit your preference.

Next, familiarize yourself with the program and your responsibilities. Visualize the shots that will be required of your camera and rehearse any complicated moves. Practice with the zoom and focus controls to ensure that you can operate them smoothly. While operating the camera, the pan and tilt locks are to remain unlocked at all times. Locking down a camera shot during a rehearsal or production is unacceptable in most studio operations! On the other hand, never leave your camera without first locking the pan and tilts locks and capping the lens.

Videotape Operators

Once you have been given the playback videotape (if there is one), cue it up and familiarize yourself with the video to be played back into the program. Note video levels and color accuracy. Adjust the video tracking if necessary for optimum playback. Also note the audio and whether it is recorded on channels 1 and/or 2, normal or Hi-Fi. Adjust your audio playback levels if necessary and coordinate with the audio operator so that he/she can set levels at the audio board.

Regarding setting cue in/out points for videotape you have two options. Either make note of the TC (time code) numbers of the in and out points, or set the readout to CT (control track) and zero the counter at the in cue point.

Confirm the position of the record tape and cue it up for recording. Again, set the readout to control track and zero it at the proper record-in point. (This should be approximately 10 seconds past the last audio/video recorded on the tape.) Confirm the proper setting of switches and patches so that you are in fact recording program video as output from the switcher and program audio from the Howell audio

board on channel 1 (normal and Hi-Fi) and director's PL on audio channel 2 (normal and Hi-Fi). This can be confirmed by monitoring the video and audio monitors connected to the record VTRs output. When recording the new program, be sure to record at least 10 seconds of black video and silent audio after the program fades to black.

NOTE: If the Director chooses to record a second take of his/her production, rewind the record tape to the previous in-point and record over the previous recording. Only one recording will be saved for each student project.

Technical Director

Before the first run through, take time to familiarize yourself with the switcher and the transitions you will be expected to execute. During the run through you will switch while taking direction over the PL (intercom). During rehearsals you will follow the director's requests while seated next to him/her in the control room. In addition to knowing the switcher, it is important that you know the monitor layout and preview shots and/or effects before taking them on-line. If there is a technical or aesthetic problem with a shot, video source or effect, bring it to the director's attention before switching to it on-line.

Production Assistant (CG Operator)

As the CG (character generator) operator it is important that you pay attention to detail and accuracy. If graphics pages are stored to disk review them for content and accuracy. If you are composing or correcting pages make sure that spelling, drop-shadow, and other details are correct. Review all pages and note position in script. Review credits for accuracy or last minute changes/additions. Coordinate with TD to review pages while keyed over video to ensure proper key settings (clip) on switcher.

Camera Operators

When a production is complete, cap your camera using the filter wheel, lock the pan and tilt controls, and place the PL headset on the pan handle. If this is the final production for the day, truck the camera to its position for storage and wrap the camera cable in a figure-eight on the wall hangers. After this is complete, assist other crew members in striking the set, coiling cable, etc.

Floor Director

As soon as the production is finished, assist the talent with the removal of their microphones. If it is the last production of the day, assist the audio engineer by removing the batteries from the microphones and placing them in their cases. Next, retrieve any personally owned props or camera graphic cards and return them to the Producer. Finally, assist other crew members with the strike of the set, floor monitors, audio, etc.

Audio Engineer

If there are more production to follow, check with the next audio engineer as to what microphones will be needed and strike those that will not be used. Return all prerecorded media (carts, discs) to the Producer. Remain at the audio board until the next engineer arrives to convey information about the channels that are being used and what audio signals are available and where. If you are the last engineer for the day, return the console to its neutral position--all faders down, switches to off. Strike all microphones and return them to the instructor.

Technical Director

Remain at the switcher until the next TD arrives to convey information about the inputs and basic set-up of the switcher. If you are the last TD for the day, return the switcher to its neutral position--black punched up on all busses. Also, unless there is a TV station studio production, power down the preview and program monitors and all other monitors.

Videotape Operator

At the completion of the project being recorded, remain in record mode for at least 10 seconds after video and audio has faded to black. At this point stop tape; rewind into the program and play for a few seconds to confirm that audio and video have been successful recorded. Once you have confirmed a successful recording for the crew, cue the tape up to a point exactly 10 seconds past the end of the recorded program and reset the control track counter to 00:00:00. Wait for the next VT operator to arrive and confirm the position of the record tape.

Remove the playback videotape from the playback VTR and return to the Producer/Director. If it is the last project for the day, return the record tape to the instructor.

LESSON 10**PRODUCTION PHASE**

The production phase starts with the set designing in the indoor programmes as the set is of the vital importance in any kind of production.

Floor plan

The floor plan allows you to sketch the approximate locations of sets, props, cameras, talent, etc. This overhead view makes it easy to consider distance, angles and other factors that may be crucial to setting up your production. At a TV station some of the studio may be occupied by semi-permanent sets that remain in place for extended periods of time.

There are different types of sets as per the demand of the producer and the nature of the programmes:

Traditional set

The sets with traditional look having arches and building designs are the one mostly used in historical plays.

These sets are also called “hard or real sets” as are made by hard material like wood and metal.

These sets involve a lot of furniture and other decoration items to give the production a classical touch.

Contemporary set

Now a days the sets used in television industry are mostly graphical with computer generated effects.

These sets are also called “soft or virtual sets” as are made by computer graphics using chrome key and animations.

Chrome key is to place a synthetic background behind the key talent that may be compare, or an anchor.

Lighting set

The set in which different lighting patterns are used to give the symbolic representation of the mood of the programmes are called lighting set, and different colours of lights are used in it.

Black screen set

In this kind of set the horizon of the studio wall is utilized with out any light on it giving an impact of darkness all around but a spot light on the characters.

Single screen set

This set is used when only one object or character is to be recorded for some programme that may be linking of a show or a magazine show with single background.

Two-screen set

This set is used when two persons are talking to each other; mostly in talk shows such kind of sets is used.

Three-screen set

The programmes having the participants or panelists on both sides of anchor involve three-screen sets.

Today with latest innovation in computer graphics technology to create highly realistic or fully imaginative environment, a virtual set is the replacement for the real or physical set. They can be integrated into telecast production in replacement of or in combination with a real set.

In theory, design categories in television production are readily classified with the programme types and utility. There are three types in this regard.

Non-representational set

In this kind of sets the scenery for general background purpose is used.

News

Interviews

Talk shows

Forums

Political discussions

Analysis and opinion

Religious programmes

Representational set

These set are used in the programmes where the story or the plot content is of fictional nature.

Drama

Show

Documentary

Celebrity show

Magazine show

Science show

Children show

Women show

Abstract sets

In such sets there is more margin of diversity as these are stylized sets.

Musical concerts

Mega shows

Extravaganza

Variety show

Design elements

Following are the elements of the design:

Line

It is any mark connecting two points that may be curved or straight.

Shape

It is any thing that has height and width and the basic shapes are rectangle, triangle and circle.

Texture

It is the look and feel of the surface.

Space

It is the distance or the area between and around different things.

Size

It is how large or small a thing can be.

Work procedure of design department

Producer designer discussion

Planning

Concept

Floor plan

Producer's approval

Budgeting

Purchase process

Property store
Carpenter workshop
Welding if any
Painting workshop
Erection of set in studio
Set decoration
Recording
Dismantling after recording

Whenever viewers sit in front of television, they have an impression of total reality. They seem to be there, where the action is, seeing every thing as it is happening, for a production team has combined their various skills to built up a carefully continued illusion, through a cunning blend of camera work, lighting, set design, audio control and mixing, script, dialogues, performance, editing, makeup and last but not the least direction. Hence the set designer is an important member of the production team.

Make up techniques

During production following basic make up improvements are to be made for the better appearance of the artists on the screen:

Shiny baldhead, Untidy hair, hair too light or dense in camera
Perspiration shine
Deep eye sockets, eyes lack definition
Shiny nose
Beard lines prominent despite shaving
Wrinkles on the neck
Lips definition
Age lines over prominent
Ears too light, different colour than adjacent skin
Eyebrows barely discernable

Essentials of Make up

General treatment
Nose treatment
Eye treatment

LESSON 11**CAMERA WORK**

The camera works on the principal of human eye and it shows what all the human eye watches through its lens. The eye retains the image for 1/16 second while the camera works at the speed of 25 frames per second and that's why the fractions of frames or pictures seem to be moving on the screen.

Camera functions

The camera can be utilized as per the requirement of the shot, situation of the programmes and the mood of the scene. There are following camera functions generally used in television productions.

Movement of lens of camera

During this technique only lens of the camera is moved

Zoom in

Image coming close to viewer

Zoom out

Image going away from the viewer

Focus

Image becoming sharp

Defocus

Image getting blur

Movement of camera itself

During this technique camera itself is moved

Pan right

Camera is moved towards right side

Pan left

Camera is moved towards left side

Tilt up

Camera is moved upwards

Tilt down

Camera is moved downwards

Movement of camera with tripod

During this technique the camera is moved with the pedestal or tripod leaving its place as well.

Dolly in

Camera is moved close to the object

Dolly out

Camera is moved away from the object

Track right

Camera is moved to the right side of the object

Track left

Camera is moved to the left side of the object

Use of crane

This is an arrangement of making a cameraman sit on an equipment like crane to make free movement over a crowd especially used in music show, concerts awards ceremonies.

Use of jib

This is an arrangement of making a camera placed on equipment like triangular stay sail set to make free movement of the camera itself while the operator is on ground controlling the camera.

Use of wide-angle lens

It is used when there is a small space available for the movement of camera. It gives the broader perspective of the shot.

Use of fish-eye lens

It is used to create dramatic effect of the situation and to show the panoramic view of the scene.

Shot

The frame being captured through the camera lens is called shot. It's the picture being photographed or scene being recorded.

Types of shots

Extreme close up (ECU)

Big close up (BCU)

Close up (CU)

Medium close up/bust shot (MCU)

Medium shot (MS)

Medium long shot (MLS)

Long shot (LS)

Very long shot (VLS)

Top/High angle shot (looking downwards)

Low angle shot (looking upwards)

Two shot (can be CU/MCU/MS)

Over the shoulder shot (OTS)

Moving subject walking into space

Differential shot

Video Equipment**Studio Cameras**

The studio television camera is the beginning of the video signal. It is here that visible light is transformed or transduced into electrical energy. The video signal remains in the form of electrical energy, either analog or digital, for most of the remaining process until a picture monitor (TV set) converts the electrical signal back into visible light. The principle parts of the studio camera are; the camera head (including lens, imaging device, and viewfinder), the camera mount, and the studio pedestal.

The Camera

Lens: The external optics is designed to collect and focus the light onto the face of the imaging device. The lens contains focusing, focal length, and aperture controls. The first two controls are made by the camera operator at the camera head, and the aperture control is typically made by the video engineer at the CCU. Studio cameras at a TV station have servo controls for zoom, and manual controls for focus. The servo zoom control, which provides smooth and variable speed zooms with a little practice, is

located on the right pan handle while the focus control is located on the left pan handle. NOTE: On a properly maintained camera and lens, focus should be set with the lens set to maximum focal length. Once set, the lens will maintain accurate focus throughout the zoom range as long as the distance between subject and lens does not change.

Imaging Devices: The internal optics, including the beam splitter, are housed in the camera body.

View Finder: The monochrome (black and white) monitor on top of the camera head is your window on the world. And while it provides no information about the colors being reproduced, it is an accurate display for the purpose of framing, focus and composition. The angle of the VF is adjustable to provide optimum viewing regardless of the height of the camera or the height of the operator. The VF has contrast and brightness controls and should be adjusted for your particular situation. These controls do not in any way affect the video output of the camera.

The Camera Mount

The camera is attached to a head which is in turn attached to the camera support--in our case a tripod and dolly combination. Types of professional camera heads include cam heads and fluid heads. Both allow for smooth pans and tilts. However, the smoothness of these movements is determined in part by the operator's proficiency and muscular coordination. Hours of practice are necessary before one can be fully proficient with camera moves worthy of "on-air" service. Please be aware of the location and use of the pan and tilt locks and tension adjustments. Never try to operate the camera head with the locks engaged, or with the tension adjustments tightened. Whenever the operator is at the camera, both the pan and tilt adjustments should be unlocked and loose enough so that the camera movements can be executed smoothly and quickly according to the director's wishes. Before the operator leaves the camera, even for a moment, the pan and tilt should be locked securely. Please follow these directions carefully!

Movement

- Primary: movement of the subject(s) in front of the camera
- Secondary: movement of the camera

Pan: horizontal movement of the camera head

Tilt: vertical movement of the camera head

Pedestal: raising or lowering of the camera head

Truck: pedestal movement left or right (in relation to the subject)

Dolly: pedestal movement forward or back (in relation to the subject)

Arc: pedestal movement around a subject, retaining a fixed distance from the subject

Tertiary: movement caused by a sequence of camera shots or transitions, e.g. cuts, dissolves, fades, wipes, etc.

Camera Operation

Before the Shoot

- Check out your headset, make sure that the intercom is working and that the Director or TD knows that you are on camera.
- Unlock the camera head and adjust the pan, and tilt drag. Never use the drag controls to lock down the camera.
- If you don't have a cable puller assigned to your camera, make sure that you have enough cable to reach your positions and that it is coiled neatly out of the way.
- Check with the video engineer to uncap the camera. Focus and set your viewfinder adjustments.
- Practice zooming and setting focus--get a feel for the mechanical or servo controls.
- If you have a shot sheet, rehearse your shots and moves.
- Check to see that the Teleprompter (if you have one) is working.
- Always lock your camera and physically cap the lens before leaving it.

During the Shoot

- Unlock the camera head and make sure that the adjustments are correct. The camera should never be operated with the pan and tilts locks engaged!
- Preset the focus once you're in position. Unless you're on air, always set your focus with the lens in its maximum focal length position.
- Make sure that your wheels are set for planned dolly or trucking moves.
- If you have a difficult move, have the FD or a floor assistant help you.
- Be aware of other objects, people, activities around you--e.g. other cameras, mic booms, monitors (don't stand between it and the talent), FD (don't run into him/her), props, light stands, etc.
- Keep your eyes on the viewfinder and be looking for your next shot--help the director but try not to "out-direct" him/her.
- Be aware of your tally light.
- Anticipate and get to your next shot quickly.
- Mark critical camera positions on the studio floor with tape.
- Use your talk back mic only in emergencies.
- Listen to the directions given to other cameras as well as your own. Use the external switch to view the "on-air" camera and try to match shots when appropriate.

After the Shoot

- Wait for the "wrap" signal to lock down your camera.
- Cap the lens
- Move your camera to its storage location and coil the cable neatly on the wall hangers in a figure-eight wrap.
- Assist with other studio wrap procedures.

Portable Camcorders

There is the Ikegami HC-400W camera with Panasonic DVCPro50 VCR backend. The department owns three of these units and they are referred to as the Red, Blue and Green units. Each camcorder has an accompanying Porta Brace grip bag with appropriately color-coded audio and grip accessories. The Ikegami professional camcorders are capable of shooting in 4:3 or 16:9 aspect ratios, and can record in DVCPro25 or DVCPro50 mode. The 25 and the 50 refer to Mbps (Megabits per second) of digital data and the 50 Mbps records at twice the tape speed of 25 Mbps, thus halving the effective length of the field tapes that are used.



The other type of camcorder is the Sony PD-100. This 3-chip DVCam format camcorder is a prosumer quality camera that is capable of high quality pictures under ideal conditions. The PD-100 has automatic focus, white-balance, and exposure...but for best results it is a good idea to learn to use the manual settings. The PD-100 has a flip-out color LCD screen that can be very helpful in certain conditions. The PD-100 can be used with either mini DV or DVCam tape stock and can shoot in either mode. Like with the DVCPro25/50 choice described above, shooting in the DVCam mode means slightly faster tape

speed, or less record time from the tape. A 60 minute DV tape, recorded in the PD-100 in DVCam mode, will last for approximately 42 minutes.



LESSON 12**LIGHT AND AUDIO****Types of cameras**

According to utility there are different types of cameras.

- Handy camera
- ENG camera
- Full facility camera
- Digital camera
- XD camera
- Beta camera

Models in use

- PD 150
- PD 170
- D 350
- D 390
- D 250 P
- D 35 P
- 16 MM
- 35 MM
- 70 MM

Types of tapes/disks

- Video
- VTR
- U-matic
- Beta
- DVC Pro
- DV cam
- Mini DV
- VHS
- VCD
- DVD
- Audio
- Magnetic tape
- CD
- DAT

Importance of sound in TV

Although TV is a visual medium still there is no video suitable for telecast without good audio. There are dialogues, music, original or wild sound; all make a package for a complete telecast.

Use of microphone

Perhaps the best way to emphasize the importance of microphone is to say that without it audio in media would not exist so every thing for a broadcast or telecast starts with a microphone.

The microphone is a transducer that converts acoustic or sound energy into electric energy. This is the basic function of a microphone. There are different types of microphones having special capabilities according to varied aesthetic demands of recordings and productions.

For example, in television if a microphone is in the shot, it should be presentable but should not call attention to itself.

For outdoor productions a microphone must be resistant to the wind sound. When distance is a factor, a microphone must isolate the sound source and still provide acceptable quality of audio.

The special requirements make microphone selection a critical and ever present creative challenge.

When you choose a microphone, you should know four things.

What type it is?

What are its directional characteristics?

What does it sound like?

What it looks like?

Types of microphones

According to technique

Moving coil/dynamic

Ribbon

Capacitor/condenser

According to direction

Omni or Multi-directional (picking sound all around)

Bi-directional (Front and rear)

Uni-directional (from front only)

According to usage

Neck microphone

Hand microphone

Cordless neck microphone

Cordless hand microphone

Cable neck microphone

Cable hand microphone

Boom handy (outdoor)

Boom on tripod (indoor)

According to programme

Drama

Talk show

Music

Magazine show

Documentary

Television Sound: The Basics

Until rather recently, far more attention was paid to video in television than to audio. "Good sound" was when you could make out what was being said; "bad sound" was when you couldn't.

This has changed. With the advent of stereo and 5.1 surround-sound, audiences have much greater expectations.

Before we can discuss some of the basic audio production concepts, sound itself must be understood. Sound has two basic characteristics that must be controlled: **loudness and frequency**.

Loudness

Although sound loudness is commonly measured in decibels (dBs), that term actually refers to two different things.

First is DBSPL (for sound pressure loudness), which is a measure of acoustic power. These are sounds we can directly hear with our ears.

These decibels go to and beyond 135, which is considered the threshold of pain and, by the way, the point at which permanent ear damage can occur. If your ears "ring" after being around a loud sound, this should be a warning sign that you have crossed the threshold of potential hearing damage. (The damage, which is irreversible, often goes unnoticed, which probably explains why the average 50-year-old in some countries has better hearing.)

Musicians who must be around high-level sound use *musician's plugs* -- special earplugs that attenuate sound level without distorting the frequency range.

Various sound pressure decibel levels (in DBSPL's) are shown here.

Sound	dBs
Jet Aircraft Taking Off	140-150
Rock Concert / Gunshots	135-140
Jackhammer at 15 meters / Subway	85-90
Average City Street / Restaurant	70- 75
Quiet Conversation / Phone Dial Tone	60-80
Office Environment	45
Whisper at 3 meters (10 feet)	30
"Silent" TV Studio	20

The second use of the term decibel, **dBm** (for the milliwatt reference level) is a unit of electrical power. These decibels are displayed on loudness meters. In audio production we are primarily interested in dBm, which represents levels of electrical power going through various pieces of audio equipment.

Two types of **VU meters** for measuring the loudness of sound are in wide use: the digital type and the analog type. Below are three examples of digital meters. The scale on the left side of the large drawing shows modulation percent (percentage of a maximum signal), and the scale on the right is in dB's.

Contrary to what logic might dictate, 0dBm (generally just designated 0dB on a VU meter) is not "zero sound" but, in a sense, the opposite, the maximum desirable sound level. (Granted, that's a bit confusing, but, then again, we didn't make up this system!)

The 0dB point on the meter is just a reference point. Therefore, it's possible to have a sound level on the meter that registers in negative dBs, just as it's possible to have a temperature of -10 degrees Centigrade or Fahrenheit.

These animated versions above illustrate how digital meters respond to sounds.

The VU meter below on the right is the traditional analog meter that has been around in one form or another since the dawn of radio.

Although easy to read, most versions do not accurately respond to short bursts of loud sound.

The dB level going through audio equipment must be carefully controlled. If the signal is allowed to pass through equipment at too low a level, noise can be introduced when the level is later increased to normal **amplitude** (audio level).

If the level is too high (significantly above 0 dB or into the red areas on the VU meter) distortion will result -- especially with digital audio. To ensure audio quality, you must pay constant attention to maintaining proper audio levels.

The animated meter shown here indicates a sound level that is a bit too high. Ideally, the needle should not go deeply into the red area this often.

Frequency

Frequency relates to the basic pitch of a sound -- how high or low it is. A frequency of 20 Hz would sound like an extremely low-pitched note on a pipe organ -- almost a rumble. At the other end of the scale, 20,000 Hz would be the highest pitched sound that most people can perceive, even higher than the highest note on a violin or piccolo.

Frequency is measured in Hertz (Hz) or cycles per second (CPS). A person with exceptionally good hearing will be able to hear sounds from 20-20,000 Hz. (Generally, women can hear higher frequencies than men.)

Since both ends of the 20-20,000Hz range represent rather extreme limits, the more common range used for television production is from 50 to 15,000 Hz. Although it doesn't quite cover the full range that can be perceived by people with good hearing, this range does cover almost all naturally occurring sounds.

The Frequency-Loudness Relationship

Even though sounds of different frequencies may technically be equal in loudness (register the same on a VU meter), human hearing does not perceive them as being of equal strength.

The red line on the graph (roughly) shows the frequency response of the human ear to different frequencies.

Because of the reduced sensitivity of the ear to both high and low frequencies, these sounds must be louder to be perceived as being equal to other frequencies.

You'll note that a good-quality microphone (the green line) is relatively "flat" in the all-important 50-15,000 Hz. range.

Listening Conditions

Equipment and listening conditions also greatly affect how different frequencies will be perceived. To compensate for some of these problems, we can adjust *bass* and *treble* controls of playback equipment.

More sophisticated equipment will include a graphic equalizer, which goes a step further and allows specific bands of frequencies to be individually adjusted for loudness.

A graphic equalizer may be necessary to match audio segments recorded under different conditions, or simply to customize audio playback to the acoustics of a specific listening area.

Note that the graphic equalizer shown here can control nine specific frequency areas.

Any piece of audio equipment -- microphone, amplifier, recorder, or audio speaker -- can adversely affect the fidelity of sound. However, it's the microphone (the initial device that transducer sound waves into electrical energy) and the audio speaker (the device that changes electrical energy back into sound waves) that represent the weakest links in audio quality.

To some degree it's possible to use graphic equalizers and other audio equipment to "clean up" the frequency response of a poor microphone. However, even the most sophisticated audio techniques can't work miracles. Thus, the better the original audio signal, the better the final product will be.

Room Acoustics

Sound, both as it's recorded and played back, is more affected by the acoustics of a room or studio than most people realize.

In an effort to create totally soundproof studios, early radio stations used to use thick carpets on the floors and heavy soundproofing on the walls.

Although possibly successful as soundproofing, the result was a lifeless and dead effect that we're not used to hearing in a normal environment, such as our living rooms.

Two types of soundproofing material are shown on the left.

At the other extreme is a room with a tile floor and hard, parallel walls that reflect sound. The result is reverberation (a slight echo) that interferes with the intelligibility of speech.

The ideal room for recording or listening to sound has just enough reverberation to sound realistic, similar to your living room possibly, but not enough to reduce the intelligibility of speech.

Microphones

Dynamic Microphones

The dynamic mic (also called a moving-coil microphone) is considered the most rugged professional microphone.

This type of mic is a good choice for electronic newsgathering (ENG) work, where a wide variety of difficult conditions are regularly encountered (such as this ENG report on a fire).

In a dynamic microphone sound waves hit a diaphragm attached to a coil of fine wire. The coil is suspended in the magnetic field of a permanent magnet.

When sound waves hit the diaphragm they move the coil of wire within the magnetic field. As a result, a small electrical current is generated that corresponds to the original sound waves. This signal must be amplified thousands of times.

When small size, optimum sensitivity, and the best quality are all prime considerations, another type of mic, the condenser mic, is often preferred.

Condenser/Capacitor Microphones

Condenser microphones (also called capacitor or electret condenser mics) are capable of top-notch audio quality.

As shown on the left, they can be made so small that they are almost invisible. (But, the smaller they are, the more expensive they tend to be!)

Condenser mics aren't as rugged as dynamic mics, and problems can result when they are used in adverse weather conditions.

Condenser mics work on the principle that governs an electric condenser or capacitor. An ultra-thin metal diaphragm is stretched tightly above a piece of flat metal or ceramic. In most condenser mics a power source maintains an electrical charge between the elements.

Sound waves hitting the diaphragm, cause fluctuations in an electrical charge, which then must be greatly amplified by a preamplifier (pre-amp). The pre-amp can be located within the microphone housing or in an outboard electronic pack. Although most pre-amps output an analog signal, some of the newer models immediately convert the output to digital.

Because they require a pre-amp, this means that, unlike the dynamic mics discussed earlier, most condenser mics require a source of power, either from an AC (standard Alternating Current) electrical power supply or from batteries.

An AC power supply for a condenser mic is sometimes built into an audio mixer or audio board. This is referred to as a phantom power supply. When this type of power supply is used, the mic cord ends up serving two functions: it delivers the signal from the mic to the mixer and it carries power from the mixer to the pre-amp of the condenser mic.

Of course, using batteries to power the pre-amp of the condenser mic is more convenient -- you don't have to use a special mixer or audio board connected to an electrical power source.

But, battery-powered condenser mics introduce a problem of their own: at the end of their life cycle the batteries can go out without warning.

To get around any unexpected problems, especially on important productions, two miniature condenser mics are often used together. If one mic goes out, the other can immediately be switched on. This double microphone technique is called dual redundancy, a term that is somewhat redundant in itself.

Summary of Dynamic and Condenser Mic Pros and Cons

Dynamic Mic Advantages	Condenser Mic Advantages
Rugged	More Sensitive
Lower Cost	Better Audio Quality
No Power Required	Can Be Extremely Small
Dynamic Mic Disadvantages	Condenser Mic Disadvantages
Lower Sensitivity and Power Output	Higher self-noise
Larger and Heavier	More Fragile
Slower Response Time	More Expensive
Not the Best Choice for Maximum Audio Quality	Prone to Weather Problems and RF Interference

Ribbon Mics

Except possibly for an announce booth, ribbon mics are seldom used in TV production.

Although they can impart a deep, resonant "coloring" to sound, they are fragile and highly sensitive to moving air. This precludes their use outside the studio and on most booms, which covers most TV production applications. Ribbon mics were primary used in radio studios.

Boundary Effect Mics

PZ (also called PZM) stands for sound pressure microphone for standard video work, which comes under the heading of a *boundary effect microphone*. This mic relies entirely on reflected sound.

In specific situations, such as when placed on a tabletop, a PZ mic will provide a pickup that's superior to that of other types of mics.

Contact Mics

As the name suggests, contact mics pick up sound by being in direct physical contact with the sound source. These mics are generally mounted on musical instruments, such as the surface of an acoustic bass, the sounding board of a piano, or near the bridge of a violin.

Contact mics have the advantage of being able to eliminate interfering external sounds and not being influenced by sound reflections from nearby objects. Their flat sides distinguish them in appearance from small personal mics.

Directional Characteristics

In an earlier module we talked about the *angle of view* of lenses -- the area that a lens "sees." Microphones have a similar attribute: their directional characteristics, or, you might say, the angle of view that they "hear."

In microphones there are three basic directional categories:

- **omni directional**
- **bi-directional**
- **unidirectional**

Omni directional Mics

Omni directional mics (also called **non-directional** mics) are (more or less) equally sensitive to sounds coming from all directions.

Although this attribute would have advantages in radio where several people could stand or be seated around a single microphone, in video production it's almost always more desirable to use some form of

directional mic. For one thing, this will reduce or eliminate unwanted sounds (behind-the-camera noise, ambient on-location noise, etc.) while maximizing sound coming from talent.

Bi-directional Mics

In a bi-directional sensitivity pattern (bipolar pattern) the mic is primarily responsive to sounds from two directions. Note drawing above.

Although commonly used in radio interviews for people sitting across from each other at a table, until the advent of stereo, bi-directional (also called *figure eight*) sensitivity patterns had limited use in television. We'll get into stereo and the need for this type of directional pattern in a later module.

Unidirectional Mics

The term unidirectional simply refers to a general classification of mics that are sensitive to sounds coming primarily from one direction.

There are four subdivisions in this category -- each being a bit more directional:

- **Cardioids**
- **Super cardioids**
- **Hyper cardioids**
- **Parabolic**

Although these terms may sound as if they belong in a medical textbook, they simply refer to how narrow the mic's pickup pattern ("angle of view") is.

Cardioids

The cardioid (pronounced car-dee-oid) pattern is named after a sensitivity pattern that vaguely resembles a heart shape. The drawing here is a highly simplified depiction of three directional patterns.

Mics using a cardioid pattern are sensitive to sounds over a wide range in front of the mic, but relatively insensitive to sounds coming from behind the mic.

Although this pattern might be useful for picking up a choir in a studio, the width of a cardioid pattern is too great for most TV applications. When placed two or more meters (7 or more feet) from a speaker, it tends to pick up unwanted, surrounding sound, including reverberation from walls.

Super-cardioids

The **super-cardioid** is even more directional than the cardioid sensitivity pattern. Whereas the cardioid has about a 180-degree angle of acceptance, the super-cardioid has about 160-degrees of coverage. When this type of mic is pointed toward a sound source, interfering (off-axis) sounds tend to be rejected.

This polar pattern is similar to that of our ears as we turn our head toward a sound we want to hear and try to ignore interfering sounds.

Hyper-cardioid and Lobar

Even more directional are the hyper-cardioid and lobar patterns with 140-degrees of coverage. Because off-axis sounds will be largely rejected, they have to be accurately pointed toward sound sources. Some highly directional shotgun mics (below) are included in the hyper-cardioid category.

Shotgun Mics

So called shotgun mics with their hyper-cardioid or narrower angles of acceptance are one of the most widely used types of mics for on-location video work. Since they are quite directional, they provide good pickup when used at a distance of 2 to 4 meters (7-13 feet) from the talent. Like other types of directional microphones, they tend to reject sound that would interfere with the on-camera talent.

Parabolic Mics

Parabolic mics represent the most highly directional type of mic application. This category refers more to how a microphone is used than to a type of mic or its basic directional pattern.

It's the parabolic reflector that creates the polar pattern for this mic, not the mic itself. In fact, the mic used in the focus point (center) of the parabola can be any general cardioid or super-cardioid mic.

The parabolic reflector can be from 30 cm to 1 meter (1 to 3 feet) in diameter.

Because of the parabolic shape of the reflector, all sound along a very narrow angle of acceptance will be directed into the microphone in the center.

Parabolic microphones can pick up sound at distances of more than 60 meters (200 or more feet). These mics are not a practical choice for general field production work, but they are often used in sports.

For parabolic mics, or any type of directional mic used on location, the person controlling the mic should always be wearing a good set of padded earphones connected to the mic's output, especially if subjects are moving.

A slight error in aiming a highly directional mic can make a big difference in audio quality.

Using Off-Camera Microphones

Although it may be appropriate to use handheld, lav, or RF mics for interviews, there are instances in television production when it's desirable to use an unseen microphone -- generally one that's outside of the camera's field of view.

Examples would be:

- **because seeing a mic wouldn't be appropriate, as in the case of a dramatic production**
- **when mic cords would restrict the movement of talent, such as in a dance number**
- **when there are too many people in the scene to use multiple personal, handheld or RF mics, such as with a choir**

Because of their nondirectional nature, omni directional or simple cardioid-patterned microphones used at a distance of 1½ meters (five or six or feet) or more quickly start picking up extraneous sounds. Depending on the acoustics of the location, this can also cause the audio to sound hollow and off-mic.

Consequently, only microphones with a super cardioid or narrower pattern should be used as off-camera mics.

Just as the eye sees selectively and may not notice a coat rack "growing out of" someone's head in a scene, the ears hear selectively and may not notice an annoying reverberation in a room, which, when picked up by a mic, can render speech difficult to understand.

Microphone Booms

In the studio the simple fish-pole moves into the much more sophisticated category of boom mic.

Microphone booms range from a small giraffe (basically a fish-pole mounted on a tripod) to a large perambulator boom (that weighs several hundred pounds, takes two people to operate, and can extend the mic over the set from a distance of 100 meters (more than 30 feet).

The largest booms have a hydraulically controlled central platform where operators sit and watch the scene on an attached TV monitor while controlling such things as the

- **left or right movement (swing) of the boom arm**
- **boom extension (reach of the arm)**
- **left to right panning of the attached microphone**
- **vertical tilt of the microphone**

Hanging Microphones

Sometimes you can get by without a boom mic, especially if the talent is confined to a limited area.

For example a mic can be suspended over a performance area by tying it to a grid pipe or fixture just above the top of the widest camera shot. The disadvantage of this approach, of course, is that the mic can't be moved during the production.

Both boom mics and suspended microphones should be checked with the studio lights turned on to make sure they do not create shadows on backgrounds or sets.

Hidden Microphones

It's sometimes possible to hide microphones close to where the on-camera talent will be seated or standing. This will eliminate both the need for personal or handheld mics and the problems that mic cords can introduce.

Microphones are sometimes taped to the back of a prop or even hidden in a table decoration, such as the vase of flowers shown here.

When placing mics, keep in mind the proximity effect discussed in an earlier module. You may find during an editing session that the audio from different mics used at different distances will not "cut together" (edit together) without annoying changes in quality.

Sometimes several mics must be used on a set at the same time. In this case each mic not being used at a particular moment should be turned down or switched off. This also reduces total ambient sound.

Phase Cancellation

Phase cancellation, which results in low-level and hollow-sounding audio, occurs when two or more mics pick up sound from the same audio source.

Because the sounds arrive at the mic at slightly different times, they end up being out of phase and to various degrees they can cancel each other out.

When multiple mics are used on a set there are four things you can do to reduce or eliminate the resulting phase cancellation:

- **place mics as close as possible to sound sources**
- **use directional mics**
- **turn down mics any time they are not needed**
- **Carefully check and vary distances between the sound sources and multiple mics to reduce or eliminate any cancellation effect (A speaker's mic should be placed at one-third or less the distance of the next nearest mic.)**

LESSON 13**DAY OF RECORDING/PRODUCTION**

Television production consists of three basic stages but the production stage and especially the day of recording is very important in this whole process.

Pre-production**Production****Post-production****Pre-requisites for Indoor Production**

Studio requisition

Planning schedule

Studio facilities

Three Cameras

Microphones

Set installed

Any change in required

Lighting

Panel/switcher

Camera control unit

Audio console

Cassette Recorders

Cassette Players

Functional Monitors

Plasma

Telephones

Tapes

Make up

Properties

Wardrobe

Costumes

Confirmation of participants

Pick and drop

Gate passes

Technical staff

Rehearsals

The rehearsals are very important before recordings as these provide an opportunity to the performers to get them acquainted with the studio environment and the co-starts so that there can be harmony on the screen among them.

Producer during recordings

Do not fatigue the crew with odd moves

Do not burden the artist with retakes

Do not spoil the mood of recording

Do not be panic while at work

Camera Moves and mechanism of recording

These are necessary to be decided between the camera crew and the producer that how the camera would move and how the artists would perform accordingly. The producer tries to establish the locale and finalizes the shot divisions.

Noting on script or register

It's always good to keep an account of the recording which helps in post-production phase a lot so the producer should jot down the points on the script or some separate register.

Communication during recording

A producer is supposed to pass instruction to the persons involved in recording so he has different sources available:

Talk back microphone for the compair /anchor /host

Studio microphone to address the audience

Head phone to communicate with cameramen

Tele-light

The red light on camera gives the indication to the artist that which camera is on record and it is for the cameramen as well to know that their camera is switched so they should not spoil the shots.

Pre-requisites for single camera Outdoor Production

Single Camera

Microphones

Lights

Monitor

Reflector

Tapes

Battery charger

Transport

Make up

Costumes

Confirmation of participants

Location management

For outstation recordings

Tour authorization

Accommodation

Boarding and lodging

Point to ponder

If you are well at script, you will be good on floor

If something is not clear on papers, it will not be clear on screen also.

Floor management

It is also an important job often done by the production assistant or the assistant director. The entries of different characters and the maintenance of different continuities are important for any production.

The production staff

They are concerned primarily with the programme's content and development.

Producer

Director

Assistant director

Lighting director

Designer

Production assistant

The production crew

They are concerned with the equipment operation.

Cameraman
Audio engineer
Audio technicians
Video technicians
Floor manager
Studio hands
Studio supervisor
Switcher
Recording engineer

Understanding and harmony

Television production is a team operation that requires the combined effort of dozens of skilled individuals to produce a programme. Technical as well as human communication is vital for successful production.

The television studio complex consists of two main areas:**The Control Room**

It is the operational command center where programme elements are directed and coordinated. It has a panel for recording purpose, switcher for inter-cutting and switching between the output given by different cameras, Camera control unit, audio console, recorder and communication system for the cameramen, artists and audience.

The studio floor

It is the area where the actual activity of production takes place that may be set of a talk show, drama, news bulletin or some play having performers.

The day of recording

Television production starts with the programme planning, when the over all production concept and approach are developed and organized as well as programme elements are rehearsed and coordinated.

Then comes the production phase that can be either live or recorded followed by then the postproduction phase when videotapes is edited and additional video and audio material is added to the edited master tape.

The producer should control the production in all aspects and assure the quality of the programme being the mastermind and the captain of the ship.

The contents of the programme must be carefully watched at all following stages:

Research
Script writing
Dramatization
Screenplay
Storyboard
Rehearsals
Dialogue delivery
Accent/pronunciation

Teleprompter machine

It is a machine to facilitate the newsreader to read the news while having direct eye contact into the lens of a camera and is controlled with the feet of newscaster. It is a screen between reader and camera that is visible to reader but does not affect the view of camera. The whole script of news bulletin is scrolled upward with the machine so that newscaster can easily read it without remembering the complete bulletin.

Video Tape Recording

Videotape playback and recording is standardized on the S-VHS (Super VHS) format. S-VHS recorded tapes will not play back properly in most standard VHS VCRs. Some newer VHS VCRs will play back an S-VHS tape but at regular VHS resolution.

Dubs from S-VHS to VHS may be requested and are encouraged for the purpose of your portfolio.

There are playback videotape machine and the record videotape machine. Both VT (videotape) machines will playback VHS or S-VHS signals, while that will also record VHS or S-VHS signals.

NOTE: The S-VHS VCRs will play back a VHS tape, but only those recorded at standard speed (SP).

VT Controls

Tapes may be cued by using control track (CTL) pulses or time code (TC). Both longitudinal time code (LTC) and vertical interval time code (VITC) are available. VITC is preferable with CTL as the second option. When CTL is used, the counter may be reset to 00:00:00 and the auto stop feature may be used.

An internal Time Base Corrector (TBC) corrects jitter, allows the VCR output to be timed and allows nominal control of picture quality, e.g. video level, set up, hue and chroma level. Unless instructed otherwise, leave these controls in the detent position. A clear cover is used to prevent accidental adjustment of TBC controls.

Tape transport is controlled by buttons and a shuttle knob. Buttons include: stop, play, pause, fast forward, rewind, and search. Once the search button is activated the shuttle knob becomes the means to advance or rewind tape with a visible picture. In shuttle the tape can be advanced or rewound at 0-32x normal speed. In the jog mode, tape can be advanced or rewound frame-by-frame by rotating the shuttle knob.

The READY button is used to turn the tape protection mode on and off. The 7650 must be in READY mode before playing or cueing tape. However, when the 7650 is inactive for an extended period of time, it automatically goes into tape protection mode to protect the tape and tape heads from unnecessary wear and tear. You may activate or deactivate the tape protection mode by pressing the READY button.

Both VHS and S-VHS (Super VHS) tapes may be played back. An S-VHS indicator light glows to indicate that an S-VHS tape has been inserted.

Tapes with normal as well as Hi-Fi audio may be played back. Always use Hi-Fi audio if available. Audio is available on the audio board as input A on channel 10. Audio playback levels for Normal audio channels 1 & 2 and Hi-Fi audio channels 1 & 2 are available just below the VU meters. Normal position for these controls is in the detent position.

Tracking adjustments may need to be made, especially for tapes that were recorded elsewhere. If picture noise occurs, adjust the tracking for the clearest picture possible. NOTE: Please return the tracking control to FIX when you have finished with that particular tape!

Video Cassette Player/Recorder

The program audio on Normal and Hi-Fi audio channel 1, with Normal and Hi-Fi audio channel 2 is reserved for the recording of Director's PL.

Patching

Prior to recording make sure that video from the switcher program out is patched into the line input. The input select switch must be set to LINE. Audio channel 1 input should be from the program audio, and audio channel 2 should be patched from the intercom system. Please consult with the lab instructor if you are unsure of any of the patching procedures.

Monitoring

Confirmation of proper video patching can be made by monitoring the video on video monitor (the right monitor just above the edit controller). Confirmation of proper audio patching and record levels for

audio channels 1 & 2 can be made by asking the audio engineer to feed tone at 0 dB and confirming the level on A1's VU meter. Set record levels for both channels with tone at 0 dB and PL audio peaking below 0 dB. Use headphones to confirm the audio content on both channels.

Recording

Before beginning to record, confirm that you are cued to the proper position on the tape and that nothing of importance will be erased when you begin recording. Ideally, you will begin recording approximately 10 seconds past the end of the last recorded program. Enter the record mode by holding the REC button while pressing the PLAY button. Once you record the program, continue to record at least 10 seconds of black video and silence before stopping tape. This is very important as it serves to separate each program with a bit of black and prevents the ends of programs from being erased inadvertently by the following recording.

When recording is complete, rewind the tape a bit and play back to confirm that audio and video have been recorded successfully and that technical problems with the recording do not exist. Once you have reported this to the director, await the director's command to either wrap or re-cue the tape for an additional recording. Projects will be recorded as often as time allows, but only the last recording will be saved. Previous recordings will be recorded over during each successive recording. Before leaving your post, communicate with the next VT operator to ensure that he/she understands the record tape's current position.

Audio Equipment

Audio Console

The audio console is a 16-channel audio board designed for stereo operation. (However, at a TV station it functions in a monaural mode.) The board has two independent stereo program outputs, a separate mix-minus output, and a monaural (L+R) output. Each of the sixteen channels has three inputs available. These are selected by pressing the A, B or C switches at the top of each channel. The A, B and C sources are identified at the bottom of each channel. It is important that no two audio sources needed for a production be routed into the same channel as only one of the three sources is available at a time on any given channel. The inputs of greatest importance are as follows:

- **A - 8 A Mic inputs 1 thru 8 on the studio audio snake**
- **9 A Tone**
- **10 A BSM#13 (S-VHS source VT)**
- **10 B Cart #1**
- **11 B Cart #2**
- **12 B Cart #3**
- **12 C CD player**

Voltage controlled slide faders allow for volume adjustment. Peak-reading LCD bar graph displays are used to indicate levels. As with VU meters, red indicates levels too hot for optimum audio

Each channel also has ON/START, OFF/STOP and CUE switches. The ON switch must be activated before any audio can pass through a given channel. When the OFF switch is depressed, audio is terminated regardless of the position of the fader. The CUE switch allows for the audio from that channel to be heard by the audio operator through the Howe's on-board speaker. The cue audio does not affect program audio and is used to monitor audio without it becoming part of the program audio. For example, using the CUE feature you can check whether a microphone is in fact working while feeding audio from another source. The mic check audio will be audible to the audio engineer using headphones, but will not be heard by those listening to program audio.

Remote Start

One feature of the board is that the ON/START switch can be wired to provide a start cue for outboard equipment, e.g. our cart machines. When the ON switch is pressed, the channel is opened and a TTL

signal is sent to the cart machine. This signal tells the cart machine to enter play mode. Note: the OFF switch does not stop the cart machine.

Equalization

The audio console is not a production console and as such does not have equalization capabilities. However, a TV station has a parametric equalizer in-line downstream of the Howe console. This provides for very specific equalization of the entire program audio mix, but not of individual channels. It is assumed that your audio is not in need of equalization before it gets to this stage of the production process.

Mix Minus

The Howe board has a mix minus option that allows the operator to subtract that channel's audio from the sum buss so that, for example, when the M-button is selected a telephone caller can have his own audio subtracted from the signal sent back down the telephone line. The caller hears the P1 and P2 signals, but not himself, thereby eliminating a feedback problem through the telephone.

Monitoring

The audio operator's intercom headsets are special due to the special needs of the position, i.e. the audio technician must be able to hear both program audio and the director. For this reason, the audio operator's headset is a double-muff with program audio in one ear and PL (intercom) in the other. The level adjustment for the PL is on the belt pack while the level control for program audio is on the board.

Timing

A count-up clock is built into the board and is very useful for timing prerecorded segments that are rolled into the program. For example, a 30 second audio segment on audio cart is used to open the program. As soon as the **ON/START** button is pressed, the cart begins to play and the clock begins to count up from 00:00. This clock will continue to count up until another ON button is pressed, and then the clock will begin again from 00:00. The clock is a useful tool as long as you know the length of audio segments to be used.

Developing an Ear

Audio engineers are professionals who have invested the time necessary to understand the technology of audio. In addition they have invested the time necessary to develop an ear. What do we mean by this? Simply that to mix audio well, you have to hear more than your casual audio consumer. You must be able to hear subtleties of tone, timbre, and acoustic presence. You have to know when the background music is not too soft, not too loud, but just right. You must be able to identify the reverb or delay that is interfering with the intelligibility of the talent. You must know when to boost the bass or cut back on the upper mid range. In short, you must be a critical listener--always trying to hear what might make the audio just a little bit better, a little bit more effective at communicating the intent of the producer.

Audio Cart

First, a few notes about audio carts:

- Cartridges are endless loops of tape which are self-cuing. Please remember to allow them re-cue before removing them from the playback machine.
- Carts can be recorded with multiple cue points. However, to avoid confusion it is recommended that you use one cart per audio cut until you master the format.
- Cartridges must be erased (degaussed) before recording new material on them.
- Label your carts carefully and note them by name in your script. An unlabeled cart is asking to be degaussed.

The production control room at TV station utilizes audio cart and audio compact disc for audio playback. Unlike CDs, audio carts can be recorded in-house and therefore are very heavily used for audio other than music alone.

Carts recorded in other locations should play back without problems on a TV cart machines. However, always test your recorded carts while you still have time to make changes if compatibility problems arise.

At a TV station, Edit 2 is the primary location for audio cartridge recording. In addition to the recording cart machine, Edit 2 contains a CD player, a reel-to-reel 1/4-inch ATR, turntable, cassette deck, and high quality microphone for VO recording.

A TV station's Production Control Room (PCR) has a three-cart stack for playback only. The ITC three cart playback stack in PCR allows the audio engineer to have as many as three carts ready to playback on cue. Make sure that the proper input selector switch is selected for each channel. Currently we use inputs 10 B, 11 B and 12 B for carts 1, 2 and 3. Always double-check your carts for level and to ensure that they are at the cue point before airtime.

Compact Disc Player

Compact Disc (CD) player in a TV station's Production Control Room (PCR) is fairly self-explanatory. Operation is very similar to consumer CD players. However, there are a few features that may be new to you.

Cuts may be cued by pressing the corresponding number on the keypad. If it is a two-digit number, first press the >10 key, then the two digits. For example, for cut #43, first press the >10 key, then the 4 key and the 3 key.

Audio cuts will play more quickly if they are cued by pressing play and pause rather than starting from stop. A special feature is automatic cueing. Auto cue cues the CD to first audio, which is sometimes a second or two after the track begins. To use auto cue press the AUTO CUE button then press the PLAY button. The CD is now in standby, cued to the start of music. Press the PLAY button again to begin playback.

SKIP buttons search from track to track while **SEARCH** buttons scan within tracks

The auto start feature in the Howe audio board does not function with the CD player. Once the CD is cued, the channel may be left on (as long as the CD is paused or stop there is no sound coming from the CD player) and the CD must be started by pressing play on the CD player.

Auxiliary Equipment

Intercom

The Clear-Com intercom system is a closed-circuit intercommunication system designed for clear, two-way communication between crew members in a live television production environment. The main station is located in the control room, and remote stations are located throughout the studio and production areas. The remote stations used most often are belt packs that are worn by the crew member. To this is attached a headset that includes either one or two earphones and a mic for talkback.

Operation is fairly simple

- Using standard microphone cable of sufficient length, attach a belt pack station (female 3-pin XLR) to the closest intercom jack. For studio personnel other than camera operators, the intercom jacks are located on the large silver panel on the studio wall. Camera operators may connect their belt pack to the intercom jack on the right rear side of the camera body. Note: The second XLR jack (male) on the belt pack is so that a second station and headset can be added by looping through with another length of audio cable.
- Attach a headset to the belt pack. Note: this is a 4-pin XLR connector rather than the 3-pin XLR used for the first connection.
- Adjust the volume control to your personal preference. This volume control controls only the volume in your earphone and does not affect the other crew members' ability to hear you.

- To talk, press and hold the talk button, or press twice quickly to latch in the on position. Speak slowly and clearly, but quietly during production, into the microphone. Once the mic has been latched on, it may be turned off by pressing the talk button once. **Note:** It is important that talking be kept to a minimum. Also, make sure that your microphone is off anytime that you are not speaking.
- When it is time to strike the studio, return cables, headsets, and belt packs to the wall where cables are stored. To release the XLR cable from the belt pack, the release button on the side of the belt pack must be depressed.

Batteries

Rechargeable batteries, the power supply for portable video, also need special attention. Although VCRs and cameras draw relatively little power, usually 15-30 watts, batteries have a way of failing at the least opportune moment. Most professional tube cameras operate optimally at 14 volts while CCD cameras typically require 12 volts. And nearly all portable VCRs operate at 12 volts. If you're not using a camcorder, separate batteries for the camera and recorder are the preferred method.

The camera and dockable S-VHS recorder require approximately 12 volts but will continue to operate down to approximately 10.6 volts. At this level it is important to change over to a fresh battery as soon as practically possible.

NOTE:

- Most rechargeable batteries are Ni-Cads (Nickel Cadmium). For those of you who are environmentally aware you know that heavy metals are environmentally unfriendly. It is important that Ni-Cad batteries be disposed of properly (most manufacturers have a trade-in policy.) And if you are really want to save the environment, whenever possible use AC power rather than battery power.

Some things to consider:

- Temperature will effect the output of a battery, cold temperature will decrease the output (during cold weather exterior shoots, try to keep batteries warm). However, heat is the number one killer of Ni-Cad batteries. Keep batteries cool while charging and during storage.
- Batteries are not rugged; they do not take shock well...**DO NOT DROP!**
- Batteries develop memories and other problems if they are not recharged according to proper procedure.

Charge Rates = Fast, Quick and Slow:

Slow = overnight or 14-16 hrs.

Quick = more than 1 hr. but less than 14

Fast = less than 1 hr. (should be used sparingly and only when batteries are near room temperature)

- For batteries without microprocessors, charge on "quick" or "slow" charge rather than "fast" (1 hr.) whenever possible
- Do not overcharge a battery
- Don't run it completely dead, i.e. replace with fresh battery at first indication of depletion
- Charge a depleted battery as soon as possible
- Store batteries in a charged condition and if stored, give them a slow, overnight charge to "top-off" the battery preceding use

NOTE: A word about battery life. Often people will come back and complain that a camera battery didn't even last through one 20 min. cassette. What in fact happened is that they powered up the camera, white balanced, checked their lighting, went through several rehearsals, changed the position of the talent, had some donuts and coffee, etc. all before shooting. If you fail to go to Standby when not actually shooting, this is exactly what will happen!

The prudent ENG/EPF battery package would include enough batteries to run all equipment for a normal day without the necessity to recharge during the day. There should be an 8 hour quick charger available for each battery so all batteries can be charged simultaneously overnight (8hrs.) A single fast charger may be included for the unexpected.

Average life expectancy of Ni-Cad batteries for video or film applications is 500 cycles, with gamut ranging from 200 to 800 cycles.

Notes Use only Lifesaver chargers:

1. Keep batteries on charger until just prior to being used
2. Return batteries to charger as soon as possible after use, preferably within 48 hours
3. If batteries have been off the charger for more than a few days, they should be placed back on the charger for at least 24 hours before they are to be used
4. Do not use slow chargers except in emergencies
5. Do not over-discharge batteries...if you operate the camcorder beyond the low battery warning light or until the camcorder shuts down, you have subjected the battery to possible irreparable damage

Videotape**There are several things you should keep in mind to insure good recordings:**

- Tape needs to be handled carefully, which means don't handle at all if possible, videocassettes should either be in the VCR in or a case!
- Store in a cool, dry, clean place (not a car trunk in summertime). Ideal storage = 68 degrees and 40% relative humidity
- videotape should never be spliced (however, if spliced only for one dub)
- should be stored on end, tape edges must be protected from damage or you could lose audio or control track
- Keep away from strong magnetic fields, i.e., monitors, speakers, etc.
- do not keep VCR in pause mode for long periods of time
- avoid using the first minute and last minute of tape due to the potential for excessive dropouts
- most production facilities use tape for only a single pass, although you can get many passes if you are careful
- beware of losing power to VCR before tape is ejected, otherwise you could eject tape before it is returned to its cassette
- it is a good idea to "exercise" or "fluff" a new tape, (ff to end and back)
- never use a wrinkled or creased tape, it could damage heads
- Make sure that the VCR is properly maintained; cleaned, tape guide tension checked, worn belts replaced, etc.

LESSON 14**LINEAR EDITING AND NLE**

The different mediums of performing arts are dependent on distinctive persons who are the backbone of any particular medium.

Film is a director medium.

Theater is an actor medium.

Radio is a speaker medium.

Television is a producer medium.

After the recording is completed with the announcement of “pack up” the recorded material on different tapes called “Chunks” in form of bits and pieces of scenes and shots with tapes numbered and marked are taken to the editing desk for post-production.

It is always good to have noting of all recorded chunks on a paper by the producer or any of the assistants, as it is the guideline for the editing. The noting should have:

Episode

Scene

Take

Writing all these details in a register will be helpful during editing of the programme as it is said, “Memorandum is always better than memory”

One must not put the memory in to examination and written matter is always recorded.

Editing

The word edit is synonymous to prepare, correct, tidy up, check over, revise, amend, change, alter, modify, adjust, transform. It is to trim or better, add or remove from the existing written matter or visual material. The words of editor, editorial, sub-editor, editor and chief editor are derived from the same.

Editing suite/room

The editing apparatus consists of a panel like a keyboard of a computer added by a round knob to shuttle and jog on machines having recorded material with different monitors for the separate display. Usually there are three recording machines used as:

Player 1

Player 2

Recorder

Players are the sources that supply the chunks recorded in bits and pieces. Normally first player has the basic visuals that are main video and player two has the secondary data that can be background voice or some strips, graphics, names to be super-imposed, overlaid or inserted on the primary video while the recorder takes the final output given by the both players.

Types of Editing

There are two types of editing techniques used according to machines.

Linear Editing**Non-linear Editing (NLE)****Linear Editing**

It is time bound as a particular time code is followed to access different data.

It is done on and by videocassettes and tapes.

Videocassettes players and recorders are used in it.

Non-linear Editing (NLE)

It is not time bound as with a single keystroke or mouse click different data can be accessed.

It is done on computers as the data is transferred from tapes to computers.

Various software programmes are used in it.

Editor

Editor is the one who plays a vital role in post-production phase. Like director, cameraman and designer, editor also has a direct impact on any programme production. The harmony and coordination between the editor and the producer is very necessary as the editing can either polish or tarnish the finished product.

During the process of editing the synchronization and equation of both the producer and editor is very important and it speeds up the pace or the work as well as it improves the programme quality.

The choice of editing either linear or non-linear solely depends on the producer, as s/he has to anticipate the needs according to available technical facilities. Linear editing is in vogue now a day due to its variety of effects, more options and provision of more audio and video layers to make a programme more colourful and bright however linear editing is speedy and less time-consuming.

Production Switcher

The switcher is an 18-input video switcher designed for both live production and post-production. Like any video switcher, the can perform video transitions such as wipes, mixes, keys, etc. The alone is not capable of digital video effects.

The switcher is a very complex device with many levels of operational functions. To keep things as simple as possible, we will focus primarily on the Downstream Bus Rows consisting of the preview and program buses (bottom two) with only occasional use of the Key Bus Row and the M/E Bus Rows (top two). For most projects the set-up functions of the switcher will be preset by the instructor. During rehearsal, Technical Directors (TDs) are encouraged to ask questions of the instructor in order to fully understand the steps necessary for a successfully switched program. However, instead of simply memorizing a set of keystrokes, we encourage you to attempt to fully understand the process that is at work.

The 18-input switcher has sixteen video bus inputs and two auxiliary inputs.

- BLK Black Video
- R.S. Routing Switcher
- CAM 1
- CAM 2
- CAM 3
- VTR 1
- VTR 2
- DEKO 1 Graphics
- DEKO 2 Graphics
- CB Color Bars
- COLOR Background color generator
- M/E Mix/Effects bank

In addition, the student will utilize the Downstream Transition Group consisting of the following buttons:

BKG MIX Mixes between the program and preview buses

UNI KEY MIX Mixes in the video signal feeding the uni keyer

DS KEY MIX Mixes in the video signal feeding the downstream keyer

FADE Mixes to or from black

Downstream Fader and the Downstream Auto-transition Group consisting of the following buttons can also be used:

TRAN Performs the selected transition at a rate specified in the setup panel

TRAN REV Performs the selected transition in reverse order

CUT Performs a cut or instantaneous transition.

Switcher Inputs

0	BLACK
1	ROUTING SWITCHER
2	VTR 1 (DVC PRO 1)
3	VTR 2 (DVC PRO 2)
4	VTR 3 (BETA SP PB/REC)
5	VTR 4 (BETA SP PB)
6	VTR 5 (3/4 INCH)
7	CAMERA 1
8	CAMERA 2
9	CAMERA 3
10	CAMERA 4
11	SYNCHRONIZER
12	COLOR BARS
13	DEKO 1
14	DEKO 2
15	TOASTER 2
16	A51
17	COLOR
18	M/E

LESSON 15**MIXING AND USES OF EFFECTS**

Animations
Graphics
Windows
Brackets
Effects
Zoom out
Zoom in
Page turn over
Dip to black
Fade in
Fade out
Dissolve
Cross fade
Wipe
Swap

Colour tone
Title
End credits
Break
Bumpers
Scroll
Strips
Superimpositions

Names
Callers
Phone number
Email
Website

Promo
Recap

Music

Fore ground
Mid ground
Background

Choice of music
Sound leveling

Mixing and Uses of effects is to beautify a production. It fills the colours in the programme with the use of animations, graphics, windows, brackets and effects like, Zoom out, Zoom in, Page turn over, Dip to black, Fade in, Fade out, Dissolve, Cross fade, Wipe, Swap. Moreover Colour tone, Title, End credits, Breaks, Bumpers, Scroll, Strips and Superimpositions like Names, Callers, Phone numbers, Email, Website is also done by mixing, as well as Promo and Recap are also prepared

Music is also adjusted in by audio mixing by keeping music in fore ground, mid ground or background. Choice of music is exercised in it and Sound leveling is done.

Live Sound Effects

Many of the sound effects (SFX) that you'll need to enhance the audio track of your television spot or program will be available in a commercially available sound effects library and the staff will dub selected effects to audio cassette at your request, and a TV station owns selected sound effects libraries on compact disc. However, there are times when a prerecorded effect is not available, or doesn't fit just right--the duration, intensity or character may not be just right. In these cases you may want to try some tricks. Artists create manual sound effects to sync up with projected film or video images. This art is very specialized and used primarily for feature film post-production. However, in a pinch you can use the following tricks or make up your own to bring that special touch to your sound track.

Take care in choosing a microphone to pick up the audio effect. Pickup pattern and location can make a great difference in the sound recorded. Also consider the acoustics of the location in which you are working.

One last note: the SFX listed below were contributed by a variety of sources who claim that these materials and actions will result in the so-stated SFX. In most cases it is true...in others you really wonder.

ARROW IN FLIGHT--1) Use a 1/4-inch dowel rod approximately two foot long. Holding it at one end, sharply sweep down past the mic at a distance of six inches. 2) For a shrill high pitched swish, use a piece of umbrella rib with the open side facing the direction of the thrust past the mic. Proximity makes a sound grow bigger, so the twang of a large rubber band will do well enough for the bow.

ARROW STRIKING--In real battles the arrows bounced off stone walls and towers making a rather undramatic clatter. An arrow landing in wood, however, is so much more satisfying aurally, so convention demands that all the best misses land in wooden paneling and tree-trunks. For this: 1) throw a dart into a piece of wood close to the mic, or 2) use a heavy knife with a sharp point, and plunge sharply into a large block of soft wood, such as balsa.

AUTO BRAKES SQUEAL--1) Drive two or three nails slightly through a piece of wood and scrape the points on a sheet of glass which is sitting on top of small blocks of wood. The small blocks of wood will aid in the resonance of the squeal. Try the same technique on various flat pieces of metal for other effective squeals. 2) Slide a drinking glass with the top placed against a pane of glass.

BASEBALL HIT WITH BAT--Hold a short piece of rubber garden hose or a small mallet and strike a large piece of bamboo.

BIRD WINGS--1) Using a hoop of stiff wire (about one foot in diameter), shape a wire handle, and sew to the hoop a piece of old silk or satin, allowing plenty of slack, using a sharp jerking motion popping the slack material back and forth. According to the bird being simulated, vary the rhythm and tempo. Bats may also be created by this method. 2) Hold a large feather duster in one hand and slap the feathers (gently) against the other hand.

BLOWS TO THE HEAD'--1) Strike a pumpkin with a mallet. 2) Strike a baseball glove with a short piece of garden hose.

BLOWS TO THE CHIN--1) lightly dampen a large powder puff and slap on your wrist close to the mic. 2) hold a piece of sponge rubber in one hand and strike with the fist. 3) Slip on a thin leather glove and strike the bare hand with the gloved fist.

BODY FALL--1) Drop a melon from the top of a ladder onto a slab of concrete. 2) Drop a gunny sack filled with sawdust or sand on a hard floor. 3) For a truly gory fall, empty a bucket of wet rags on a slab of cement...ugh!

BOILING WATER--Blow slowly through a straw into a glass of water. NOTE: thicker liquids may be simulated by replacing the water with milk.

BOTTLE BEING OPENED--1) Use a child's pop gun. 2) Press two "plumbers friends" together and pull suddenly apart. 3) Flick finger against cheek with open mouth. 4) Use a bottle with a tight fitting cork.

BREAKING BONES--1) Chew Life Savers close to the mic. 2) Snap small diameter dowel rods wrapped in soft paper.

BREAKING EGGS--Take a six-inch square of very course sand paper and fold corners in toward the center, rough side up. Lay in the palm of your hand and squeeze suddenly.

BREEZE--Fold a newspaper into quarter size, then cut slices up from the bottom nearly to the top. Holding it at the top, sways the paper near the mic, but don't touch it or you will cancel the illusion.

BRUSH CRACKLING--Use a broom straw, working it between your hands very close to the mic.

CRASHES--1) Metallic crashes may be made by piling a collection of tin and metal scraps into a large tub and dumping it out. To get a sustained crash shake and rattle the tub until you need that big crash sound. 2) Wooden crashes can be created by smashing any large type of wood fruit basket next to the mic. 3) Door crashes are created by simple brute force, i.e., hitting a door with the shoulder, and simultaneously smashing a wood fruit basket next to the mic.

CREAKS--1) Twist and squeeze an unwaxed paper cup next to the mic. 2) Mount a rusty hinge between two blocks of wood. Then twist so that the hinge will bind as you either open or close the hinge. 3) Use a combination of string, powdered resin, and cloth. The resin should be spread in the cloth which is then pulled along the string. For the very best sound, the string should be attached to something rigid such as a resonant wooden panel. Varying the pressure on the string will give you different types of creaking sounds. 4) For the creak of a ship rubbing against a wharf, rub an inflated rubber balloon close to the mic.

CRICKETS--Run your fingernail along the fine teeth of a very cheap plastic comb. Remember, the sound should alternate between being very loud then soft.

DISH BREAK--Use castoff dishes or unfired pottery rejects. To get the true sound of the break, place several pre-broken pieces of dishes in a whole dish, then drop. The whole dish may not break, but it will give the impact effect, and the broken pieces will scatter, giving the sound of scattering fragments.

DRAWERS--Slide two pieces of wood together. Put a small crosspiece of wood on one so that the other will hit it at the end of the slide indicating the close of the drawer.

EATING--For this effect, the complete noisemaking set consists of a single knife, fork, plate, cup saucer, and spoon. It only takes a little of this noise to suggest a lot.

ELECTRIC SPARK--Rub two blocks of sandpaper-covered wood together in one fast long stroke.

ELEVATOR DOOR--Run a roller skate (old type with metal wheels) over a long, flat piece of metal. There should be a wooden bumper at one end and several nails at the other, Rolling the skate against nails gives the effect of opening the door, and the wood block for the close.

FALLING INTO THE WATER--The important thing here is to get the impact of the hit on the surface of the water. To simulate this effect, however, reverse the procedure this way: Secure a large wash tub or wooden tub. Fill it about 3/4 full of water. Get a bucket and sink it until it is full of water, then turn it over, but keep it submerged. With the bottom side up, yank sharply out of the tub.

OR, Fill a bucket with water and have a plunger ready. For most splashes, have the more flexible rubber lip folded into the bell, then plunge the plunger into the bucket. For a larger splash, just do it harder. (Thanks to Wanderer)

FIRE--1) gently twists a piece of cellophane close to the mic. 2) For larger fires, add to the cellophane the frequent snap of crackling pieces of berry box. 3) To get sudden flare of flames, take the ignition of gasoline-soaked wood, snap open an umbrella, then bring in the crackle of cellophane.

FOOTSTEPS: IN LEAVES--Stir corn flakes in a small cardboard box with the fingers. Watch the rhythm of the walking.

FOOTSTEPS: IN MUD--In a large wash pan place several crumpled and shredded newspapers (paper towels also work fine). Leave very little water in the pan. Simulate walking by using the palm of the hand for footsteps.

FOOTSTEPS: IN SNOW--Squeeze a box of cornstarch with the fingers in the proper rhythm. Better yet, put the cornstarch in a chamois bag.

FOOTSTEPS: ON STAIRS--Use just the ball of the foot in a forward sliding motion. Do not use the heel.

GOLF BALL STRUCK--Use a swish stick (see: arrow in flight). Then at the end of the swing, strike a small piece of two-by-four with a wooden mallet.

GUNSHOT--1) Strike a leather cushion with a thin flat stick, 2) Prick an inflated rubber balloon with a pin. 3) Hit a large corrugated box with a curtain rod.

HIT IN THE FACE--To get the comedy effect of a person being slapped in the face with a ripe tomato, pie, etc., use a wash basin and rags. In the wash basin, put a little water, then several layers of paper towels or rags. Let these soak up the water. Next prepare a wad of rags so they may be easily held in the hand. Soak the bundle of rags also, On cue, slap the wad of rags in the pan. This must be done quite close to the mic, but not so close as to get the mic wet!

JAIL DOOR--The characteristic sound of an iron door is the noise when it clangs shut. For this, clang two flat pieces of metal together, then let one slide along the other for a moment, signifying the bar sliding into place.

LIGHTING A MATCH--There are two distinctive sounds in lighting a match: the igniting and flare of the flame. Use large wooden matches and scratch on a piece of sandpaper about six inches from the mic. As soon as the match flames, move as close to the mic as feasible. In this way the flare of the flame is audible.

LOCOMOTIVES--1) a simple technique is to cover one side of two pieces of two-by-four with heavy sandpaper. Rub the two sandpaper sides together. 2) A better technique is to use a cheap scrub brush with a good handle on it. 3) The beat or rhythm differs between freight and a passenger steam locomotive. The freight engine rhythm is CHUFF chuff, CHUFF chuff. Every other beat is accented. 4) The passenger train sounds like this: CHUFF chuff chuff chuff, CHUFF chuff chuff chuff. The accent is on the first of every four beats.

PHONE BOOTH DOOR--Unfold and fold the legs of a metal card table. Honest! Good luck however finding a phone booth to shoot!

POURING A DRINK--Always touch the edge of the glass with the bottle to establish the sound.

RAIN--1) Take a ball of cellophane and loosely wrap it in tissue paper, then roll it slightly between the hands. 2) Drop salt on different materials; in the case of a tin roof, drop the salt on a piece of metal.

SIZZLE--To get the sound of a sizzle as of someone backing into a hot stove; put a heated electric iron into a very shallow pan of water. If you want the effect of bacon frying on the stove, place a little lubricating oil on top of the water.

Or, Stretch a piece of waxed paper taut next to the microphone. Pour uncooked rice onto the paper. (This effect can also stand in for the sound of rain.)

TELEPHONE--Adapt a standard telephone so that the buzzer can be worked by a press button. In order to suggest that the ring is stopped by picking up the hand-piece, it is usual to finish up in the middle of the ring, followed quickly by the sound of the hand-piece being lifted. As this last sound is much quieter than the ringing it should be emphasized a little. Cut down on the amount of figures to be dialed, but if calling a known location, use dialogue over, or make sure the first three digits are 555.

LESSON 16**SELECTION OF THE NEWS****What is News?**

News is some thing or matter new, fresh, unusual, unique, strange and exclusive.

It may be defined as accurate fact or idea that will interest a large number of viewers. In a news strangeness, abnormality, unexpectedness and nearness of and event, all add to interest in the news story.

The American College Dictionary defines news as “A report of any recent event or situation and as the report of event published in a newspaper”

According to Lord Northcliffe’ “if a dog bites a man it is no news but if a man bites a dog it’s news.”

News is in fact a communication between human beings from the earliest period of human civilization.

News is information about an event, some development plan, and movement of important persons as it is said, “big names make big news.”

Qualities of news

- Accurate
- Balanced
- Truthful
- Recent
- Exact
- Perfect
- Objective
- Impartial
- Unbiased
- Disinclined
- Concise
- Short
- Brief
- To the point
- Clear

Elements of news

- Timeliness/Immediacy
- Proximity
- Consequence
- Prominence
- Suspense
- Mystery
- Oddity
- Conflict
- Progress
- Action
- Interest
- Human Emotions

News and Documentary Production

Twelve Factors in Newsworthiness

Those involved in broadcast news must understand 12 factors that constitute news value, or newsworthiness.

- ✧ **Timeliness**
- ✧ **proximity**
- ✧ **exceptional quality**
- ✧ **possible future impact**
- ✧ **prominence**
- ✧ **conflict**
- ✧ **the number of people involved or affected**
- ✧ **consequence**
- ✧ **human interest**
- ✧ **pathos**
- ✧ **shock value**
- ✧ **titillation component**

1. Timeliness: News is what's new. An afternoon raid on a rock cocaine house may warrant a live ENG report during the 6 p.m. news. However, tomorrow, unless there are major new developments, the same story will probably not be important enough to mention.

2. Proximity: If 15 people are killed in your hometown, your local TV station will undoubtedly consider it news. But if 15 people are killed in Manzanillo, Montserrat, Moyobamba, or some other distant place you've never heard of, it will probably pass without notice. But there are exceptions.

3. Exceptional quality: One exception centers on how the people died. If the people in Manzanillo were killed because of a bus or car accident, this would not be nearly as newsworthy as if they died from an earthquake or stings from "killer bees," feared insects that have now invaded the United States. Exceptional quality refers to how uncommon an event is. A man getting a job as a music conductor is not news—unless that man is blind.

4. Possible future impact: The killer bee example illustrates another news element: possible future impact. The fact that the killer bees are now in the United States and may eventually be a threat to people watching the news makes the story much more newsworthy.

A mundane burglary of an office in the Watergate Hotel in Washington, DC, was hardly news until two reporters named Woodward and Bernstein saw the implications and the possible future impact. Eventually, the story behind this seemingly common burglary brought down a U.S. President.

5. Prominence: The 15 deaths in Manzanillo might also go by unnoticed by the local media unless someone prominent was on the bus—possibly a movie star or a well-known politician. If a U.S. Supreme Court Justice gets married, it's news; if John Smith, your next-door neighbor, gets married, it probably isn't.

6. Conflict: Conflict in its many forms has long held the interest of observers. The conflict may be physical or emotional. It can be open, overt conflict, such as a civil uprising against police authority, or it may be ideological conflict between political candidates.

The conflict could be as simple as a person standing on his principles and spending a year fighting city hall over a parking citation. In addition to "people against people" conflict, there can be conflict with wild animals, nature, the environment, or even the frontier of space.

7. The number of people involved or affected: The more people *involved* in a news event, be it a demonstration or a tragic accident, the more newsworthy the story is. Likewise, the number of people *affected* by the event, whether it's a new health threat or a new tax ruling, the more newsworthy the story is.

8. Consequence: The fact that a car hit a utility pole isn't news, unless, as a consequence, power is lost throughout a city for several hours. The fact that a computer virus found its way into a computer system

might not be news until it bankrupts a business, shuts down a telephone system, or endangers lives by destroying crucial medical data at a hospital.

9. Human interest: Human-interest stories are generally soft news. Examples would be a baby beauty contest, a person whose pet happens to be a nine-foot boa constrictor, or a man who makes a cart so that his two-legged dog can move around again.

On a slow news day even a story of fire fighters getting a cat out of a tree might make a suitable story. (Or, as shown here, a kid meeting a kid.) Human-interest angles can be found in most hard news stories. A flood will undoubtedly have many human-interest angles: a lost child reunited with its parents after two days, a boy who lost his dog, or families returning to their mud-filled homes.

10. Pathos: The fact that people like to hear about the misfortunes of others can't be denied. Seeing or hearing about such things commonly elicits feelings of pity, sorrow, sympathy, and compassion. Some call these stories "tear jerkers."

Examples are the child who is now all alone after his parents were killed in a car accident, the elderly woman who just lost her life savings to a con artist, or the blind man whose seeing-eye dog was poisoned.

This category isn't just limited to people. How about horses that were found neglected and starving, or the dog that sits at the curb expectantly waiting for its master to return from work each day, even though the man was killed in an accident weeks ago.

11. Shock value: An explosion in a factory has less shock value if it was caused by gas leak than if it was caused by a terrorist. The story of a six year-old boy who shot his mother with a revolver found in a bedside drawer has more shock (and therefore news) value than if same woman died of a heart attack.

Both shock value and the titillation factor (below) are well known to the tabloid press. The lure of these two factors is also related to some stories getting inordinate attention, such as the sordid details of a politician's or evangelist's affair—which brings us to the final point.

12. Titillation component: This factor primarily involves gender and is commonly featured—some would say exploited—during rating periods.

LESSON 17**WRITING OF THE NEWS**

News is very important thing in today's media scenario and there are a numbers of factors to modify the importance of news in actual practice.

The policy of news medium may increase or diminish the importance of the story.

The class of viewers and listeners that dominates the audience of a channel determines largely what is news for that medium.

The amount of time available on television determines whether is told briefly or in detail and thus time alters the value of a news story.

Repeating the same news also sometimes decreases the importance of a news story.

How to write the news?

The news story is totally and radically different from all other kinds of composition. A narrative, a short story, a novel, a play, a drama, book, or a film script begins with a description of the background or with the introduction of various characters and conditions. The story ends soon after the climax is reached. On the contrary, a standard news story starts with the climax and leaves the details for the closing sentence.

The story in all other cases opens gradually and major information is given in middle of a story while in news it opens with a bang all concrete things are mentioned at start and then the relevant detail is described.

The inverted pyramid

The pyramid or the upright triangle is the style of fiction or literary writing where as the news follows the inverse triangle or inverted pyramid style.

Contents of news

What?	What happened? What is the event?
When?	When it occurred, at what time it took place?
Where?	The place, where the incident occurred.
Who?	The persons involved at that occasion.
Why?	The reason of that particular issue.
How?	The sequence of the event.

Lead

It is the heading of the news that contains the above-mentioned five Ws and one H.

Intro

It means the introduction and it is first and the foremost part of the news as it contains the gist of whole news. Many features and essay have also the intro.

Credit line

Credit line is the thing mentioned in the start of a news that's is the place of news with its source from where it has been obtained.

Body text

Intro is followed by the body text that contains the details of a particular story.

Types of news according to contents

- News based on facts
- News based on statement
- News based on action

News based on facts

The structure of the news based on fact will be as follows;

Leading fact**Secondary fact****Other fact**

In the lead the most important facts or the climax of the story is given and as the story proceeds further facts, secondary or subsequent information is revealed. Such kind of story is not very difficult to write. The important thing is to judge the relative value of data and fact available and to arrange them in order of their importance. The composition breaks logically at every paragraph and can easily be cut down or lengthened as according to time available.

News based on statement

The statement or the quote of some prominent personality is also taken as a news as in our country there is a lot of statement journalism.

The structure of such news will be as follows;

Lead summary of the statement

Summary of less important part

Summary of even lesser important part

These include speeches, views; interviews talks, comments and opinions based on recorded information delivered either in written form or verbally told to the news reporters.

News based on statement

The action news is quite difficult to write as compared to rest of two types of the stories. The reporter only narrated the action but he has to keep in mind the dramatic incidents, description of persons involved in that action, statements of eyewitnesses and explanatory data as well. After the lead is written and important events are given in chronological order, important information, background and detail is provided.

Finding out the lead

A reporter while writing a news story of any kind is constantly in search of a fact or a combination that will be suitable for a lead. After all the fact and information the reporter faces the task of converting them to in to a brisk beginning. In most of the news stories, the most important act or information is given in the opening paragraph, which is lead and for lead usually “answer the five Ws technique” is followed.

The lead should be clear, provocative and simple, as one can easily understand it. Usually it should be with a name, a noun, or an article, rarely with a participle, proposition or complete passage.

Example

Three persons (who) killed and nine injured last night (when) as a speeding truck (what) collided (why) with a coach while overtaking another bus (how) at GT road (where).

The television newsroom is more complicated than that of radio or a paper's newsroom as television newsroom has editing equipment and production experts and other technical apparatus.

LESSON 18**EDITING OF THE NEWS**

The word edit is synonymous to prepare, correct, tidy up, check over, revise, amend, change, alter, modify, adjust, transform and this all is done while editing any written item as well as the news.

The editing desk of a news channel is the hub and center around which all activities of news production revolve and upon which news team ultimately concentrate.

The gathering of news is an interesting and peculiar job and for this purposes a large crew is engaged in every quarter of the world, reporting to their principal news stories, momentous, interesting dull, sad and funny.

News is a short-lived and ephemeral commodity, yet it is regarded as essential to civilization and in the making of that commodity a sub-editor plays an important role in shaping it in to form, attractive and pleasant.

Media has no control over the events taking place all around, but they have to present the sum total of the day's happening in a digestible form. Great occurrences are few and far between and minor happenings are more numerous.

A particular day may be full with great events or even one event may overwhelm all other happenings. The next day may be very insignificant from the news point of view but the sub-editor has to produce the bulletin and has to make it as interesting as possible to the large number of people who listen and watch it.

Although the sub-editor cannot determine the nature or the quality of the material gathered of the day but one can control the use of news. S/he has to choose enough for filing the time of different news bulletins. Keeping that limitation in view, the sub-editor can pick, choose and reject the news but it cannot be arbitrary or random.

Throughout the whole process of selection, he has to take care of the policy of the news channel. The quality of resultant production depends on wisdom, the judgment and the skill of group of sub-editors producing the news bulletin.

The reporters exercise an initial discrimination in the selection of the news and in shaping it according to the policy and time available with a news channel, but it is in the newsroom where it is finally dressed for bulletin. It is here that the news is polished and improved and errors that creep in reporter's copy are corrected. It is in the newsroom that the news takes a new form.

Thus the sub-editor has to be ever vigilant. Competent handling of the copy is essential to every news channel and an inefficient sub-editor can nullify the efforts of a best reporter and a very efficient direction of the superior staff. While efficient and experienced sub-editors can correct the errors of the reporting staff if any and can recover the indifferent and loosely worded copy.

Since the sub-editor has the last word in the production of the news bulletin, their inefficiency, lack of knowledge and failures mar the finished product. For these particular reasons they have to be careful, intelligent, knowledge able, alert and skilled.

The sub-editing of a news, the cutting of the news according to time available on any given day, the formation of suitable headlines, and arrangement of news bulletins require a very high grade of news sense, but also a sound education, a lot of general knowledge and a long practice of news making, competence in international affairs, and a sense of balance and proportion are the attributes of a good sub-editor.

Editing the news

The first essential of news editing is accuracy.

Every news producer and sub-editor should remember the channel's reputation for fairness and reliability rests upon an accurate presentation of facts.

A sub-editor has to keep in mind the number and class of people who would be interested in these news as well as need for telecasting them while they still have news value.

The geographical nearness of an event does at to the interest for the viewers.

The viewers have interest in all sorts of contests and conflicts.

Characteristics of good news

It is the briefest possible summary of a story.

It includes five Ws and H that are important.

It should consist of one paragraph preferably but it often has more than one paragraphs.

It has all the main points of the story.

It quickly summarizes the most important fact of the story in first few words.

It begins with specific interesting and affecting words.

It is distributed in small sentences when too much information would make an excessive long sentence.

It cites the source from where the news is generated.

It identifies the persons mentioned.

It relates to previous news if it is a follow-up story.

Process of editing a news

The process of editing is intended to make it easier for the newscaster to read the copy. Corrections must be indicated clearly and matter inserted written legibly. All letters should be written carefully.

The sub-editor first reads the story to get the general sense. He may mark a mistake here and there in first reading but he reserves his efforts mostly for the second reading. He should read it again for the third time to eliminate the possibility of oversight and to see that the story reads coherent. Then he gives the headline.

An experienced editor may edit the news story in first reading but it is recommended that a story should be read once again after marking out the mistakes and corrections.

Reporters should be instructed to end each page of copy on a complete paragraph. It makes for good speed in the composing room and eliminates the need of cutting the story into parts in the composing room as each page may be given to different compositor.

If the writer has not observed this rule, the sub-editor should rewrite the copy to make each page a complete unit.

Editing the news copy, which in journalistic term is called "Subbing", is a progressively becoming more important as the speed of news coverage increases and the news horizon broadens.

The sub-editor can make a first rate newspaper out of a third rate copy. On the other hand a poor sub-editor can spoil the work of the best reporter. It is he who reconstructs and reduces the news to its proportional time.

The different sub-editors on the desk also specialize in different sort of news but quite often they have to handle all type of news coming to the news channel.

LESSON 19**COMPILATION OF NEWS BULLETIN**

The recent past has witnessed an explosion in the number of news media serving the audience all over the world. There are various television Channels, full time and all news networks, sports channel, financial news channel, entertainment channel, historical channel, religious channel and even weather channel.

More news is available now than at any other time in human history. Obviously news is an important commodity for all kind of public. Before anything becomes news, however, it must be reported, a rise in gasoline prices, a city council meeting, a road accident, a political gathering, a protest rally, all must be filtered through the eyes and ears of the a journalist.

A reporter must be aware of qualities that characterize a news story, the types of news that exist, and the difference in the way the various media cover news.

From the million of things happen every day, print, broadcast, telecast and online journalist decide which few things are worth reporting. Deciding what is newsworthy is not an exact science. News values are formed by tradition, technology, organizational policy, and increasingly economics.

Nonetheless most of the journalists agree that there are some common elements that characterize newsworthy events. In addition to five traditional elements of timeliness, proximity, prominence, consequence and human interest of news value, economic plays a vital role now.

First, some stories cost more to cover than others. It is cheaper to send a reporter with a camera crew to city council meeting than to assign a team of reporters to investigate city council's corruption. Some news operations might not be willing to pay the price for such story.

Conversely after spending a large some of money pursuing in a story, the news channel might run it, even if it had little traditional news value, simply to justify its cost to the management.

By the same token, the cost of new technology is reflected in the types of stories that are covered. When TV stations went to Electronic News Gathering (ENG) stories that could be covered live became more important.

In fact, many organizations, conscious of scheduling of TV news programmes, plan their meetings and demonstrations during the newscast to enhance their chance of receiving TV coverage.

Compiling a News Bulletin

While compiling a news bulletin, generally news can be broken into three broad categories:

Hard news**Soft news****Investigative report****Hard news**

Hard news stories make up the bulk of news reporting. They typically embody the traditional news values. Hard news consists of basic fact. It is the news of important public events, such as government actions, international happenings, social conditions, the economy, crime, environment and science.

Hard news has significance for the large number of people. The front sections of a newspaper, or magazine and the lead stories of a radio or television newscast usually are filled with hard news.

In the broadcast media, with the added considerations of limited time, sound and video, telecast reporting follows a square format. The information level stays about the same throughout the story.

There is usually no time for less important facts that would come in the last paragraph of a newspaper story.

TV and radio news stories are either a hard or a soft lead. A hard news contains the most important information, the basic fact of the story. Where as a soft lead is used to get the viewers attention, it may not convey much information.

The lead then supported by the body of the story, which introduces new information and it amplifies the lead. The summations, the final few sentences in the report can be used to personalize the main point, introduce another fact, or discuss future developments.

The broadcast or news telecast is totally different from that of print news: it is more informal, conversational, and simple. In addition it is designed to complement sound bites that are the voice of newsmaker or videotape segment.

Soft news

Soft news or feature covers a wide territory. The one thing all soft news has in common is that it interests the audience. Features typically rely on human interest for their news value. They appeal to people's curiosity, sympathy, skepticism, disbelief, or amazement. They can be about places, people, animals, topics, events, or products. Some stories that would be classified as soft news are the birth of a kangaroo at a local zoo, a personality sketch of a local resident who has a small part in the upcoming movie, a cook who works as a stand-up comedian, a teenager gets a tax refund check.

Features are entertaining and the audience likes them. Many television and print vehicles are based primarily on the soft content.

TV features are more common than radio features. In some large TV markets one or more reporters cover nothing but features. Almost all stations have a feature file where story ideas are catalogued. If a local TV station does not have the resource to produce local features, it can look to syndication companies that provide the general interest features for a subscription fee.

Telecast features also use a variety of formats. Humorous leads and delaying the main points until the end sometimes work well, a technique often used in features. A simple narrative structure, used in everyday storytelling, can also be effective. The interview format is also popular; particularly when the feature is about a well-known personality.

Investigative report

These reports unearth significant matters of public importance through the use of non-routine information gathering methods. Since the Watergate affair was uncovered by a pair of Washington newspaper reporters investigative reporting has also been looked upon as primarily concerned with exposing corruption in high places.

Investigative reports require a good deal of time and money. Because of these heavy investments, they are generally longer than the typical telecast news item. Telecast investigative reports are usually packaged in documentaries or in a 10-15 minutes segment of a news magazine programme.

In television and radio, the investigative reporters have less time to explore background issues. Documents and records are hard to portray on television, so less emphasis is placed on them, instead the TV reporter must come up with the interviews and other visual aspects that will illustrate the story. Moreover the length of a TV report will sometimes dictate its form.

Speed is more important for news telecast than it is for the press. TV is almost always first with the news as a newspaper has to wait for the next morning to give the latest news while a television channel has several news bulletins in 24 hours. Therefore TV deadlines are more frequent than that of newspaper deadlines. The modern TV reporter also uses camera for news items.

Television was introduced to the world about thirty-five years after the radio in 1945. At most of the places the television developed as sister organization to the radio; therefore it has grown up as a sister operation to radiomen. Television outclassed all other media of communication in effectiveness as it illustrated and is very close to face-to-face communication, which is considered most suitable and effective mode of communication.

LESSON 20**PRESENTATION OF NEWS BULLETIN**

There are many types of news telecast and each one is presented in different manners and prepared in different style. Probably the most elementary type of news telecast is one in which the television reporters find it necessary to process news items, making them worthy watching and hearable than readable.

Everyone experienced in the field of electronic media knows that there are newscasters and newsreaders, who merely read a news bulletin, and the news anchors or the news commentator, who take the news of the day, relate it to happening of the past and to those of probable future, and analyze its significance.

The speaker, who puts a great deal of his personality into such presentation, gives this news telecast in a less formal manner. The news that is presented by a commentator may be coloured by his/her own attitude or by the policy of either his station or the sponsor, if the news telecast is sponsored.

The viewers are tuning in on a programme, anchors usually save their most important item for second place unless their news is preceded by the lengthy announcements. An item of national or international interest is considered most important.

The news-anchor attempts to tie up today's story with the news of yesterday, forming sort of 'continued story' effect which shows how the events of the yesterday have led to those of today, and how these events may effect the society and history in the future.

During the course of programme the news commentator includes some human-interest stories. It is good practice to insert short, bright, and fast moving items between long news features. As the news reporter or producer, the news anchor must have the sense of what will appeal the greatest number of viewers:

Weather is subject of universal interest while financial statement will interest only a limited class. The conversational news of the news anchor is not so immediate as that presented in the press news report. Some news anchors speak extemporary from the notes, cleverly changing their pace and pitch to conform to content of the items and to mark a change of subject.

There are news anchors who endeavour to their items together regardless of their relationship; to do this sometimes results in monotony. The news anchor must not allow the news items to cause alarm or anxiety for the safety of friends or relatives of the viewers.

The larger rather all the news channels maintain their own ticker service, which is used as the basis for the manuscript prepared by the news producers.

The great problem of the news broadcaster is that his program is a daily feature and in many instances may run as many as three or more times a day, rather on hourly basis as is being done presently. To be able to find material and methods of presenting material is a problem.

Here in our electronic media mostly news producer, reporters and even anchors are formerly newspaper or radio newsmen who have developed a good sense of news values. Many of the news anchors have travelled extensively or acted as field reporters so that they have a background that is helpful in presenting a news bulletin in impressive and interesting manner.

Undoubtedly the most important prerequisite for the presentation of any item to be telecast is that it be news, and that it be either significant or have human appeal. The television news editor considers whether the item will have mass appeal or whether it is unusual.

If the item is not of national, international or state interest the telecaster is concerned whether it deals with the locale within the primary range of the television station. If the persons who are involved are of particular importance, the item has news value.

Many TV stations and the sponsoring agencies require that their telecast combine information with entertainment and consequently humorous and human-interest stories are mixed together and interspersed between the more significant items or are used in the conclusion of the news telecast.

It is always better to avoid shocking and frightening, dreadful and horrible news item and stories like court trials with unpleasant angles, particularly of gender, social evils, divorces except of famous personalities, crime only outstanding cases and that to minimized, capital punishment, except that which has resulted from trials which have been in the public eye.

This does not mean that all unpleasant cases and distasteful items are discarded; it does mean that as far as possible the television reporter and producer avoids being alarmist. This is the result of the television's whole-family audience.

Furthermore, in presentation of news bulletin the news producer must take into consideration that he may be held for defamation, libel or slander, blasphemy, immoral telecast, contempt of court of sedition and select items to avoid any of such charges. The time of the day when the news is to be telecast influences the selection and presentation of items. Cancer, reptiles, false teeth, are not the topics for mealtime news telecast.

Of course accuracy is essential in the reports of news bulletins, as an inaccurate news item cannot be killed as it can be in a newspaper.

LESSON 21**MAKING SPECIAL BULLETINS**

In today's scenario as the electronic media have grown up a lot and it cater for all types of audience. Now a day we have news bulletins for almost all kinds of viewers. There are general news bulletins, which include all kind of news items for wide-ranging public. Then we have special news bulletins on specified news channels as well.

Trade/industry

Such kind of channels telecast news related to trade, business, buying and selling, stock exchange matters, rise and fall of shares of different companies. The information is presented by scrolling on screen all the time.

Commerce/business

These channels update the specified audiences having interest in commerce, import and export issues.

Agriculture

In our country that has a larger agricultural economy base, different channels prepare programmes and news bulletins about farmers and peasants regarding seeds, fertilizers, insecticides, pesticides, agro-medicines and livestock.

Sports

Sports is a topic of interest of all age groups of viewers and to cater this need all the news channels televise the special programmes, have special news bulletins, live transmissions about the different tournaments and competitions being held nationally and internationally.

Show biz

The matters regarding the activities of film, radio, theatre and television artists, singers, actors, performers, directors, is of prime interest to general public and they want to know about even their personal profiles so the news channels also have portion for them in their news bulletins.

Fashion

Due to the advancement in media people are more aware of fashions in and out, life styles in vogue, make up techniques and methods of make over, so the news channels also address this type of community.

Music

We do have television channels locally and globally dedicated to music only and the whole daylong transmissions on such channels have music charts, albums and numbers as well as gossips of singers.

Drama

There are channels specified only to drama, sit-com, tragedy, comedy, Series, serial, soaps and these air the relevant information.

Weather

Weather is the topic of concern for every body to plan the day activities like traveling out station or doing laundry at home so all the news channels have weather reports in their news bulletins but there is no specified weather channel so far in our country.

Educational

These channels are education oriented and they aim at distant education for the people living in remote areas or those not able to attend full-time courses. There are lectures on different subjects through distance learning.

Religious

We do have couple of channels which target only a specified audience interested to know the religious matters, answers to their queries and for the clarification of their doubts.

Health

The programmes regarding health, personal hygiene, the diseases and the treatments of different ailments are of great public concern and channels keep the audience enlightened about these issues.

Scientific

These news bulletins on news channels or even on entertainment channels are about latest discoveries, inventions, scientific research and technological advancements.

Food

One can watch channels nationally and internationally also that air only the food programmes related to preparation of different food items, recipes and ingredients, food travelogue and tastes of different areas.

Documentary/ Investigation

The documentary making is a difficult job that involves a lot of time and cost. We have few channels specified for documentaries but all the channels do have documentaries in their transmissions. There are also the programmes regarding the reasons of natural calamities and different accidents occurred.

Youth

Youth, although very important segment of the society is vital in national progress and prosperity but there are only few programmes for their career counseling on channels.

Women

These programmes on channels focus home decoration, cooking, gardening guidelines, beauty tips and kids upbringing.

Making your news more comprehensive

There are some instructions followed by the correspondents and reporters of news channels and these are equally applicable to the writer of news copy as well.

Send some thing	don't always "transmit" or "dispatch"
Call a person	don't always "summon" them
Buy something	don't always "purchase" it
Leave some place	don't always "depart"
Act	don't always "take action"
Will	not always "is going to"
Arrest or seize	not always "take into custody"
Show	don't always "display" or "exhibit"
Get	don't always "obtain"
Need	don't always "require"
See	don't always "witness"
Can	not always "is able to"
Help	not always "aid" or "assist"
Hurt	not always "injured"
Break	not always "fracture"
Build	not always "construct"
Meet	Not always "convene"
Doctor	Not always "physician"

LESSON 22**TECHNICAL CODES, TERMINOLOGY, AND PRODUCTION GRAMMAR****TV production**

TV production is the process of making a programme, from an initial story idea or commission through scriptwriting, shooting, editing and finally distribution to an audience. Typically it involves a large number of people and can take anywhere between a few months and several years to complete. Production takes place all over the world in a huge range of economic, social and political contexts, using a variety of technologies and techniques.

Stages in TV production**Pre-production**

Preparation for the shoot, in which cast and crew are hired, locations are selected, and sets are built.

Production

The raw elements for the finished film are recorded.

Post-production

The film is edited, sound effects, music and any computer effects are added, and the film is completed.

Creativity

Creativity (or creativeness) is a mental process involving the generation of new ideas or concepts, or new associations between existing ideas or concepts.

From a scientific point of view, the products of creative thought (sometimes referred to as divergent thought) are usually considered to have both originality and appropriateness. An alternative, more everyday conception of creativity is that it is simply the act of making something new.

Idea

It is the plan of action, a general notion, conception, comprehension, construct, thing, formed in the mind, directly conceived or intuited object of thought or something formed by mentally combining all its characteristics or particulars.

An idea is an image, also concept or abstraction formed and existing in the mind. Human capability to contemplate ideas is associated with the ability of reasoning, self-reflection, and the ability to acquire and apply intellect.

Concept

Concepts are expected to be useful in dealing with reality. Generally speaking, concepts are taken to be (a) acquired dispositions to recognize perceived objects as being of this kind or of that ontological kind, and at the same time (b) to understand what this kind or that kind of object is like, and consequently (c) to perceive a number of perceived particulars as being the same in kind and to discriminate between them and other sensible particulars that are different in kind.

Casting

The process of talent hunt for any programme is casting. The casting director finds actors for the parts in the script. This normally requires an audition by the actor. Lead actors are carefully chosen and are often based on the actor's reputation or "star power."

Script

A screenplay or script is an outline, written by a screenwriter, for a film or television program. Screenplays can be original works or adaptations from existing works such as novels. A screenplay differs from a script in that it is more specifically targeted at the visual, narrative arts, such as film and television, whereas a script can involve an outline of "what happens" in a comic, an advertisement, a theatrical play and other creations.

Research

Research is constant navigation to know the truth.

Research is continuous effort to dig out facts.

Research is an endeavour to find something new.

Research is making new interpretation of existing knowledge.

Research is an addition to already present knowledge.

Screenplay

A screenplay or script is an outline, written by a screenwriter, for a film or television program. Screenplays can be original works or adaptations from existing works such as novels. A screenplay differs from a script in that it is more specifically targeted at the visual, narrative arts, such as film and television, whereas a script can involve a sketch of "what happens" in a comic, an advertisement, a theatrical play and other creations.

Rehearsal

The actors rehearse their script and blocking with the director. The picture and sound crews then rehearse with the actors. Finally, the action is shot with as many takes as the director wishes.

Cameraman

One or more camera operators who operate the television cameras, though in some instances these can also be operated from Production Control Room using remote heads.

Frame

Frame is one of the many single photographic images in a motion picture

Shot

Shot (film) is part of a film between two cuts.

Television studio

A television studio is an installation in which television or video productions take place, either for live television, for recording live to tape, or for the acquisition of raw footage for postproduction. The design of a studio is similar to, and derived from, movie studios, with a few amendments for the special requirements of television production. A professional television studio generally has several rooms, which are kept separate for noise and practicality reasons. These rooms are connected via intercom, and personnel will be divided among these workplaces.

Studio floor

The studio floor is the actual stage on which the actions that will be recorded take place. A studio floor has the following characteristics and installations:

- Decoration and/or sets
- Cameras on pedestals
- Microphones
- Lighting rigs and the associated controlling equipment.
- Several video monitors for visual feedback from the production control room
- A small public address system for communication
- A glass window between PCR and studio floor for direct visual contact is usually desired, but not always possible

While a production is in progress, the following people work in the studio floor.

- The on-screen "talent" themselves, and any guests - the subjects of the show.
- A floor director, who has overall charge of the studio area, and who relays timing and other information from the director.

- One or more camera operators who operate the television cameras, though in some instances these can also be operated from PCR using remote heads.

Possibly a teleprompter operator, especially if this is a news broadcast.

Set Design

The production designer creates the look and feel of the production sets and props working with the art director to create these elements.

Light

The lighting is rigged; the camera and sound recording equipment are set up. At the same time the actors are wardrobe in their costumes and attend the hair and make-up departments.

Set design

Set or Scenic design (also known as stage design, set design or production design) is the creation of theatrical scenery. Scenic designers have traditionally come from a variety of artistic backgrounds, but nowadays, generally speaking, they are trained professionals, often with M.F.A. degrees in theatre arts.

Survey for location

The location manager finds and manages the film locations. Most pictures are shot in the predictable environment of a studio sound stage but occasionally outdoor sequences will call for filming on location.

Microphone

A microphone sometimes referred to as a mike or mic is an acoustic to electric transducer or sensor that converts sound into an electrical signal.

Videotape

Videotape is a means of recording images and sound onto magnetic tape as opposed to movie film. In virtually all cases, a helical scan video head rotates against the moving tape to record the data in two dimensions, because video signals have a very high bandwidth, and static heads would require extremely high tape speeds. Video tape is used in both video tape recorders (VTRs or, more common, video cassette recorders (VCRs) and video cameras. Tape is a linear method of storing information, and since nearly all video recordings made nowadays are digital, it is expected to gradually lose importance as non-linear/random access methods of storing digital video data are becoming more common.

Camera Control Unit

It is technical director's station, with waveform monitors, vector scopes and the camera control units or remote control panels for the camera control units (CCUs).

Switcher/vision mixer

A vision mixer (also called video switcher, video mixer or production switcher) is a device used to select between several different video sources and in some cases composite (mix) video sources together and add special effects. This is similar to what a mixing console does for audio.

Panel

Control panel is a flat area containing controls and indicators and may be associated with the operation of any machinery.

Audio Mixing Console

Audio mixing console and other audio equipment such as effects devices, character generator creates the majority of the names and full screen graphics that are inserted into the program and digital video effects and/or still frame devices.

Studio floor

The studio floor is the actual stage on which the actions that will be recorded take place. A studio floor has the following characteristics and installations:

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- microphones
- Lighting rigs and the associated controlling equipment.
- several video monitors for visual feedback from the production control room
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- A floor director, who has overall charge of the studio area, and who relays timing and other information from the director.
- One or more camera operators who operate the television cameras, though in some instances these can also be operated from PCR using remote heads.
- Possibly a teleprompter operator, especially if this is a news broadcast.

Production control room

The production control room (also known as the 'gallery') is the place in a television studio in which the composition of the outgoing program takes place

Video monitor wall

A video monitor wall, with monitors for program, preview, videotape machines, cameras, graphics and other video sources.

Camera Control Unit

It is technical director's station, with waveform monitors, vector scopes and the camera control units or remote control panels for the camera control units (CCUs)

Video editing

Non-Linear Editing System, using computers with video editing software

Linear Video Editing, using videotape

Video editing is the process of re-arranging or modifying segments of video to form another piece of video. The goals of video editing are the same as in film editing — the removal of unwanted footage, the isolation of desired footage, and the arrangement of footage in time to synthesize a new piece of footage.

Non-linear editing

Non-linear editing for film and television postproduction is a modern editing method which involves being able to access any frame in a video clip with the same ease as any other. This method is similar in concept to the "cut and glue" technique used in film editing from the beginning. However, when working with film, it is a destructive process, as the actual film negative must be cut. Non-linear, non-destructive methods began to appear with the introduction of digital video technology.

Video and audio data are first digitized to hard disks or other digital storage devices. The data is either recorded directly to the storage device or is imported from another source. Once imported they can be edited on a computer using any of a wide range of software. For a comprehensive list of available software, see List of video editing software, whereas Comparison of video editing software gives more detail of features and functionality.

Video camera

A video camera is a camera used for electronic motion picture acquisition, initially developed by the television industry but now common in other applications as well. Video cameras are used primarily in two modes. The first, characteristic of much early television, is what might be called a live broadcast, where the camera feeds real time images directly to a screen for immediate observation; in addition to live television production, such usage is characteristic of security, military/tactical, and industrial operations where surreptitious or remote viewing is required. The second is to have the images recorded to a storage device for archiving or further processing; videotape is traditional for this purpose, but optical disc media, hard disk, and flash memory are all used as well. Recorded video is used not only in television and film production, but also surveillance and monitoring tasks where unattended recording of a situation is required for later analysis.

Electronic field production (EFP)

Electronic field production (EFP) is a television industry term referring to television production which takes place outside of a formal studio, in a practical location or special venue. Some typical applications of electronic field production include awards shows, concerts, major newsmaker interviews, political conventions and sporting events.

Electronic field production (EFP) places the emphasis on high-quality, multi-camera photography, advanced graphics and sound.

Electronic News Gathering

ENG is a broadcasting (usually television) industry acronym which stands for electronic news gathering. It can mean anything from a lone reporter taking a single camcorder out to get a story to an entire television crew taking a satellite truck on location to do a live report for a newscast. In its early days, the term ENG was used by newsroom staff to differentiate between the NG (newsgathering) crews that collected TV news with traditional film cameras and the new ENG crews who collected tv news with new electronic analogue tapes.

Teleprompter

A teleprompter (also known as an autocue) is a display device that prompts the person speaking with an electronic visual text of a speech or script. Using a teleprompter is similar to the practice of using cue cards. The screen is in front of the lens of the camera, and the words on the screen are reflected to the eyes of the speaker using a one-way mirror.

LESSON 23**TYPES OF TV PRODUCTION**

Television is known as the strongest of all the media and in present time it has become a central part of world culture. The home entertainment centre, the campaign of advertisers, training and information dissemination, politics, sports; religion or social activities, all are the focus of television today.

This powerful medium requires a team of aesthetically sensitive and technically skilled individuals to communicate ideas and emotions to a particular audience. Television brings together a great art to produce the programmes.

- The scriptwriter's command of dialogue
- The researcher's in-depth knowledge
- The actor's power of oratory
- The performer's suitable expression,
- The makeup artist's subtle touch
- The lighting directors controlled shadows,
- The set designer's environmental influence,
- The cameraman's reflections,
- The audio engineer's skill in blending music,
- The mixing expert's sound effects,
- The editor's presentational talent,
- The producer's command and control

Magazine Shows

- Talk show
- Music show
- Celebrity show
- Health show
- Commerce show
- Road show
- Game show
- Quiz show
- Kids show
- Fashion show
- Women show
- Cooking show
- Beauty show
- Reality show

Specific audience programming

- Religious programmes
- Women programmes
- Children programmes
- Sports programme
- News programmes
- Current affairs programmes
- Views and comments programmes
- Analytical programmes
- Opinion formation programmes

Genre

- Comedy
- Tragedy
- Action
- Thriller
- Adventurous
- Romantic
- Fiction
- Historical
- Epic
- Fiction
- Science fiction
- Fantasy

LESSON 24**DRAMA AND DOCUMENTARY**

Drama is the specific mode of fiction represented in performance. It is derived from a Greek word meaning "action" or "to do".

Dramas are performed in various media: theatre, radio, film, and television. Drama is often combined with music and dance: the drama in opera is sung throughout; musicals include spoken dialogue and songs; and some forms of drama have regular musical accompaniment like melodrama.

In certain periods of history (the ancient Roman and modern Romantic) dramas have been written to be read rather than performed. In improvisation, the drama does not pre-exist the moment of performance; performers devise a dramatic script spontaneously before an audience.

Documentary film is a broad category of visual expression that is based on the attempt, in one fashion or another, to "document" reality. Although "documentary film" originally referred to movies shot on film stock, it has subsequently expanded to include video and digital productions that can be either direct-to-video or made for a television series. Documentary, as it applies here, works to identify a "filmmaking practice, a cinematic tradition, and mode of audience reception" that is continually evolving and is without clear boundaries.

Defining documentary

The word "documentary" was first applied to films of this nature in a review of Robert Flaherty's film *Moana* (1926), published in the *New York Sun* on 8 February 1926 and written by "The Moviegoer", a pen name for documentarian John Grierson.

In the 1930s, Grierson further argued in his essay *First Principles of Documentary* that *Moana* had "documentary value". Grierson's principles of documentary were that cinema's potential for observing life could be exploited in a new art form; that the "original" actor and "original" scene are better guides than their fiction counterparts to interpreting the modern world; and that materials "thus taken from the raw" can be more real than the acted article. In this regard, Grierson's views align with Vertov's contempt for dramatic fiction as "bourgeois excess," though with considerably more subtlety. Grierson's definition of documentary as "creative treatment of actuality" has gained some acceptance, though it presents philosophical questions about documentaries containing stagings and reenactments.

Drama

- Drama serial
- Soap serial
- Mini-serial
- Sit-com situational comedy
- Long play
- Tele-film
- Short film

Documentary

- Historical
- Informative
- Investigative
- Docu-drama

More Hazards in News and Documentary Work

Although we touched on the hazards of news reporting in the last module, we need to note here that seasoned reporters realize that people can go into a kind of "shock fog" during crises, and cannot always be counted on to respond rationally.

Add to this the fact that a crew will be working under its own deadline-related pressures and it becomes obvious that special precautions must be observed.

Finally, you ever should have some ideas for news stories or documentaries that can make a positive difference.

It Takes Commitment and Courage

When we see news and documentary stories from hostile and dangerous locations, we seldom stop to think that in capturing the story a video grapher took the same or greater personal risks than the reporter that you see on camera. (The reporters are often not even on the scene; they add their narration later in relative safety.)

In each of these cases, and in many more like them, courageous video graphers were willing to risk it all for what they saw as a greater good.

LESSON 25**SOURCES OF TV NEWS**

There are many source, basis, supplier, informant, spokesperson and origins of a television news story. News sources are the ways and means through which a TV channel gets news. Here are some important sources of newsgathering.

- Reporters
- Correspondents
- Monitoring
- Press releases from public sector organizations
- Press note from the district management
- Handout from DGPR and PID

Directorate General of Public Relations and Press Information Department

- Media contacts
- Opinion leaders/Politicians
- Celebrities/ Players/ media icons
- Press conferences
- Media briefings
- Important function, ceremony, workshop, seminar or symposium
- Hospitals/social institutes
- Police station/fire brigade
- Jails/ Courts
- District offices
- Educational institutions
- Chambers of commerce and industry
- Banks State, Scheduled, Agriculture and commercial
- News agencies
- Corporate sector
- Public gatherings
- Web sources
- News papers

Reporters

The biggest source of news for any station is its reporting staff. The reporters live in the community to which they are telecasting through everyday contact with people in the area, from there observations as they move in the society and from their informers they get news for their organization. So the chief assignment of the reporter is to get news for the channel he or she is attached with.

Correspondents

They are the part time journalists who work for the newspaper and are paid through lineage of the story.

Monitoring

Monitoring officers listen to the transmissions in different languages, translate them into English and make a report of it. Monitors normally work in three shifts.

For good monitoring a monitor must be proficient in the language he is monitoring. Senior monitors scrutinize the monitoring reports and finally the news items to be made a part of news bulletin are sent to the news editors.

Press Release

A news release or press release or press statement is a written or recorded communication, directed at members of the news media, for the purpose of announcing something, claimed as having news value. Sometimes news releases are sent for the purpose of announcing news conferences. Typically, it is mailed, faxed, or e-mailed to the assignment editors at newspapers, magazines, radio stations, television stations, and/or television networks.

Press Conference

A news conference or press conference is a media event in which newsmaker (person who holds press conference) invites journalists to hear him speak and most often, ask questions. In a news conference, one or more speakers may make a statement, which may be followed by questions from reporters. Sometimes only questioning occurs; sometimes there is a statement with no questions permitted.

A media event at which no statements are made, and no questions allowed, is called a photo opportunity. A government may wish to open their proceedings for the media to witness events, such as the passing of a piece of legislation from the government in parliament to the senate, via media availability.

News Agency

A news agency is an organization of journalists established to supply news reports to organizations in the newspapers, magazines, and radio and television channels. They are also known as wire services or news services. News agencies generally prepare hard news stories that can be used by other news organizations with little or no modification. They provide these articles in bulk, electronically through wire services, today, they frequently use Internet.

National News Agencies:

- ❖ Associated Press of Pakistan (APP)
- ❖ Pakistan Press Association (PPA) /
- ❖ Pakistan Press International (PPI)
- ❖ United Press of Pakistan (UPP)
- ❖ Independent News Pakistan (INP)
- ❖ News Network International (NNI)
- ❖ Kashmir Press International (KPI)/
- ❖ SANA (South Asian News Agency)
- ❖ Online News International (ONI)

International News Agencies:

- ❖ Reuters (UK)
- ❖ Agence France Presse (AFP)
- ❖ Associated press (AP)
- ❖ ANSA (ITALY)
- ❖ Australian Associated Press
- ❖ Canadian Press
- ❖ China News Service
- ❖ New China News Agency (NCNA)
- ❖ Iran News Agency (IRNA)

News Sources**Broadcast news comes from:**

- The local reporter's primary sources
- News services such as the Associated Press
- Media outlets, such as newspapers, radio and TV stations
- Press releases provided by corporations, agencies, and special interest groups

The world's largest newsgathering association, the Associated Press (AP), operates bureaus in 120 U.S. cities and in more than 130 foreign countries, reaching one-third of the world's population. In addition to the AP, there are also a number of smaller wire services, including those operated by large newspapers.

Internet Research

With billions of pages of information available, reporters now rely heavily on reputable Internet sources in researching stories. They also consult newspaper archives, or stories that were previously published in newspapers.

And then, as we've noted, there are the Internet blogs. The writers of reputable blogs have become a significant social and political force in our society. Many of these writers are featured on news and interview programs. As of late people working for the major news organizations have started personal blogs to include information and commentary not featured in the mainstream media.

Computerized Newsrooms

Today, broadcast stations have computerized newsrooms and the steady stream of news from these services is electronically written onto a computer hard disk. Using a computer terminal a news editor can quickly scroll through an index of stories that have been electronically stored.

Some news editing programs, such as the one illustrated below, allow you to bring up wire stores from the newsroom computer (shown on the left) and rewrite it, or copy segments directly into the news script you are writing (shown on the right).

Computer programs in the newsroom programs are basic to –

- Storing a steady stream of news copy from wire services.
- Providing key word search capabilities for wire copy, Internet sources, and archived stories.
- Facilitating the writing of stories (note illustration above).
- Calling up still store pages of graphics.
- Creating and calling up CG (character generator) pages of text.
- Programming the sequence of stories, video, and graphics (i.e., the complete newscast) on video servers.
- Providing teleprompter outputs.
- Instantly rearranging news stories and recalculating times to accommodate last minute changes - even while the newscast is on the air.

Some newsroom systems can be programmed to switch video and audio sources to correspond to programmed cues in the teleprompter text.

Television stations affiliated with a network and **O-and-O stations** (those owned and operated by a network) receive daily afternoon and evening satellite news feeds provided by network reporters and affiliated TV stations. Since most of these stories are not used on the network's nightly news, they make good regional, national, and international segments for local newscasts.

Independent stations

(Those not affiliated with a network) have television news services they can subscribe to -- the largest being the Cable News Network (CNN).

Whatever the source, the news feeds are recorded for review by the local TV news producer or editor. Stories selected for broadcast are normally saved to a video server or assembled on videotapes and "rolled into" the local news as needed.

Regional, national, or even international stories can often be developed from a local perspective.

As examples, a major event that takes place in a foreign country can elicit reactions from local people of the same nationality; a crime wave in an adjoining county may cause local people to react; or a shakeup in a New York company may impact employees or related businesses in the station's area.

Balance between local, regional, national, and international stories must be considered. Plus, you need to consider the important element of *visual variety*, which in this case involves a balance between ENG segments and stories that are simply read on-camera with supporting graphics.

Although the anchor point for most newscasts is a TV station studio, TV audiences like the visual variety and authenticity associated with news segments done outside the studio. Newscasts are now routinely being anchored from foreign countries that dominate the night's news coverage.

LESSON 26**FUNCTIONS OF A REPORTER**

Reporters are the eyes and ears for any news channel as they move around in a range of beats through out the day and gather the news items from various sources. They get back to the news desk and make the news stories for the preparation of different bulletins.

There are following functions of a television reporter:

- To cover the city events
- To lead the production team
- To make the news reports
- To move into respective beats
- To go to press conferences
- To attend the media briefings
- To jot down the notes
- To gather the news
- To dig out the news
- To have liaison with PROs
- To get the relevant documents
- To write a news
- To rewrite a news
- To edit a news
- To make the quick decisions
- To select a newsworthy occurrences
- To investigate the reasons of an incidents
- To write down follow-up stories
- To have acquaintance with existing situations
- To have general knowledge
- To have time management
- To be a team leader
- To be good at language
- To follow press laws
- To abide by code of ethics
- To be socially responsible
- To avoid sensationalism
- To have decision power

LESSON 27**BEATS OF REPORTING**

Reporters attend the respective offices of their news channels and check the development in their relevant beat, areas of interest and sectors before they proceed to field for the gathering of news, which ultimately becomes the part of a news bulletin.

These reporters in general are called the staff reporters however they may be named according to their duties and beats as well. There are following beats of a television reporter.

1. **City reporter**
2. **Social reporters**
3. **Crime reporter**
4. **Political reporter**
5. **Court reporter**
6. **Health reporter**
7. **Agricultural reporter**
8. **Religious reporter**
9. **Commerce reporter**
10. **Education reporter**
11. **Social reporter**
12. **Show-biz reporter**
13. **Sports reporter**
14. **Women reporter**
15. **Youth reporter**
16. **Fashion reporter**
17. **District reporter**
18. **Special reporter**
19. **Cultural reporter**
20. **Development reporter**

LESSON 28

STRUCTURE OF NEWS DEPARTMENT

One of the traditional mass communications is the presence of a large number of gatekeepers. This fact is seen in gathering and reporting of news for conventional print and broadcast media.

Reporting is a team effort and quite a few members of the team serve as gatekeepers. Online reporting in contrast may have only one or a few gatekeepers.

There are two main sources of news; **staff reports** and the **wire services**. Other less important sources include **feature syndicates** as well as **handouts** and **releases** from various public and private sources.

The **City Editor** is the captain of the news reporting team. He or she assigns stories to the reporters and supervises their work.

There are two types of reporters:

- **Beat Reporters**
Cover some topics on regular basis, such as crime beat or health beat.
- **General assignment reporters**
Cover what ever assignment is given to them or come up.

A typical day for the general assignment reporter might consist of covering an auto accident, a speech, by a visiting politician and a rock concert. Stories from the reporters are passed along to the city editor, where they are approved and sent to the copy desk for further editing.

The **Managing Editor** and the **Assistant Managing Editor** are also part of the news team. They are responsible for the overall daily preparation of news bulletins.

The city editor can decide not to cover a story in the first place or not to run a story even if the event is covered.

The reporter has wide latitude of judgment over what he or she chooses to include in the story.

The **Copy Editor** can change the story as needed and the **Managing Editor** has the power to emphasize or de-emphasize the story to fit the needs of the day.

Organization of a newspaper news room

Managing editor

City editor

Wire editor

City editor

Photographers

Reporters

Beat reporters

General assignment reporters

The sources of news for the broadcast media are similar to those for the news paper. Special **Wire Services** cater to television and radio stations and local reporters are assigned to cover nearby events. In addition many broadcast and telecast news rooms subscribe to **Syndicated News Services** or if affiliated with a network have access to the net's news feed.

The telecast newsroom is organized along different lines from its print counterpart.

- At the **Local Stations**, **News Director** is in-charge of over all news operation.
- In **Large Stations**, most **News Directors** spend their time on administrative work, personnel, budgets, equipment and so on.

- In **Smaller Stations** most news directors perform other functions such as being anchorperson as well.

Next in command is **Executive Producer** who supervises all the producers in the news room. Typically producers are assigned to the **early morning, morning, noon, evening, night, and late-night** newscast. In addition to looking after the producer, executive producer might also produce the evening news, typically the stations most important programme.

Organization of a TV news room

News director
Executive producer
Assignment editor
 Producers
 Reporters
 Editors

Online media

The structure of an online news organization may take several shapes. In some operations, the online division may be separated and independent entity, in others, the online segment may be integrated with the parent print or broadcast news organizations.

The news flow in an online news department is similar to that in the traditional media. Top executives decide how the site will be structured and how many specialty area e.g. **sports, financial, weather, entertainment** it will contain.

Editors decide what content will be used on the website, which stories will have additional audio and video files, where the stories will be placed and how often they will be updated. Staff members skilled in website design take care of the technical side.

Online news department that are affiliated with the broadcast or cable networks, use the audio and video appeared on the parent network, but may edit it differently.

Other stories may be rewritten from wire copy or from copy that has appeared in print or on the air. Not all but some online news however is recycled. Most online news staffs also employ reporters who do original reporting for the website.

Organization of an online newsroom

Executive editor
Producer
Design managers
Producer
Editors
 Reporters
Design managers
 Multimedia designers
 Web technicians

LESSON 29**ELECTRONIC FIELD PRODUCTION****Electronic field production (EFP)**

Electronic field production (EFP) is a television industry term referring to television production which takes place outside of a formal studio, in a practical location or special venue.

Some typical applications of Electronic Field Production include **awards shows, concerts, major newsmaker interviews, political conventions and sporting events.**

Electronic field production (EFP) places the emphasis on high-quality, multi-camera photography, advanced graphics and sound.

Sports

Sports broadcasts make up the majority of EFPs. Major broadcast networks once owned their own production trailers for covering major events, but since then, with the explosion in networks on cable and over-the-air, they and broadcast rental companies rent production trucks by the day or week for more routine or remote productions.

A typical sports production truck includes:

A **large video switcher**, with an **external digital video effects unit** and several **mix/effect equipment** allows the director, flexibility in calling for certain visual effects in the broadcast.

Several tripod-mounted and hand-held cameras.

A variety of **zoom lenses** for the tripod-mounted "hard" cameras, typically at least 50x to 100x magnification, and a maximum focal length of at least 600 mm. The extreme amount of magnification is necessary because the cameras can be located quite a distance from the action.

Several **video recording** and **playback** devices such as **VCRs** or **hard disk recorders**. Certain cameras or video feeds can be "isolated" to specific decks, and when something happens that the producer or director wants to see again, the deck can be rewound and shown on the air as an instant replay. Hard disk recorders typically allow some limited editing capabilities, allowing highlight reels to be edited together in the middle of a game.

Several character generators allowing scores and statistics to be shown on screen. The scoreboards used in most sports facilities can be linked to the truck to drive the television production's graphics as well as the arena scoreboards.

An **audio mixing booth** and a variety of **microphones** to capture audio from the sportscasters and from the field of play.

Several miles of **various types of cable**.

Electronic news gathering



Microwave trucks seen transmitting. Modern news employs these trucks extensively.

ENG is a broadcasting (usually television) industry acronym which stands for **Electronic News Gathering**. It can mean anything from a lone reporter taking a single camcorder or camera out to get a story to an entire television crew taking a satellite truck on location to do a live report for a newscast.

In its early days, the term **ENG** was used by newsroom staff to differentiate between the **NG** (newsgathering) crews that collected TV news with traditional film cameras and the new ENG crews who collected TV news with new electronic analogue tape formats like low band U-matic.

The requirement for the differentiation stems from the radically different methods of post-production involved in video versus film. Film needed to be processed before editing, unlike tape where footage could be edited fairly quickly, thus dramatically reducing the turn-around time for a story. The use of film in newsgathering virtually disappeared by the early 1980s.

ENG originally referred to the use of point-to-point terrestrial microwave signals to backhaul the remote signal to the studio. In modern news operations, however, it also includes **SNG (Satellite News Gathering)** and **DSNG (digital satellite news gathering)**.

ENG is almost always done using a specially modified truck or van such as those made by Sat-Comm, Broadcast Vehicles, E-N-G, Frontline, and Wolf coach. Terrestrial microwave vehicles can usually be identified by their masts which can be extended up to 50 feet (15 m) in the air (to allow line-of-sight with the station's receiver antennas), while satellite trucks always use a larger dish that unfolds and points skywards towards one of the geostationary communications satellites operated by companies.

The acronym ENG was also used as title for a Canadian television drama about the news department of a TV station. The series ran for 96 episodes, from 1989-1994.

LESSON 30**LIVE TRANSMISSIONS**

With the growth of electronic media the importance of live transmission and telecast has increased a lot. Be it a entertainment programme, a sports event, a news bulletin, a current affairs program or a coverage of an significant occurrence, the live transmission keeps the viewers glued to their television screens and the audience is remains aware of, what all is happening around them locally and globally.

Live transmission can be either outdoor or indoor productions but the techniques followed, the equipment required, the staff needed are more or less same, except that in the out door productions an Electronic Field Production (EFP) is created and it takes place outside of a formal studio in a practical location, where as indoor productions are studio based and are aired through Master Control Room (MCR).

Television studio

A television studio is an installation in which television or video productions take place, either for live television, for recording live to tape, or for the acquisition of raw footage for postproduction. The design of a studio is similar to, and derived from, movie studios, with a few amendments for the special requirements of television production. A professional television studio generally has several rooms, which are kept separate for noise and practicality reasons. These rooms are connected via intercom, and personnel will be divided among these workplaces. Generally, a television studio consists of the following rooms:

Studio floor

The studio floor is the actual stage on which the actions that will be recorded take place. A studio floor has the following characteristics and installations:

- Decoration and/or sets
- Cameras on pedestals
- Microphones
- Lighting rigs and the associated controlling equipment.
- Several video monitors for visual feedback from the production control room
- A small public address system for communication
- A glass window between PCR and studio floor for direct visual contact is usually desired, but not always possible

While a production is in progress, the following people work in the studio floor:

- The on-screen "talent" themselves, and any guests - the subjects of the show.
- A floor director, who has overall charge of the studio area, and who relays timing and other information from the director.
- One or more camera operators who operate the television cameras, though in some instances these can also be operated from PCR using remote heads.
- Possibly a teleprompter operator, especially if this is a news broadcast.

Production control room



The production control room (also known as the 'gallery') is the place in a television studio in which the composition of the outgoing program takes place. Facilities in a PCR include:

Video monitor wall

A video monitor wall, with monitors for program, preview, videotape machines, cameras, graphics and other video sources

Switcher

Switcher is a device where all video sources are controlled and taken to air. Also known as a special effects generator

Audio mixing console and other audio equipment such as effects devices

Character generator creates the majority of the names and full screen graphics that are inserted into the program

Digital video effects and/or still frame devices (if not integrated in the vision mixer)

Technical director's station, with waveform monitors, vector-scopes and the camera control units or remote control panels for the camera control units (CCUs)

VTRs may also be located in the PCR, but are also often found in the central machine room.

Master control room

The master control room houses equipment that is too noisy or runs too hot for the production control room. It also makes sure that wire lengths and installation requirements keep within manageable lengths, since most high-quality wiring runs only between devices in this room. This can include:

The actual circuitry and connection boxes of the vision mixer, DVE and character generator devices.

Master Control Room or "MCR" is the place where the on-air signal is controlled. It may include controls to playback programs and commercials, switch local or network feeds; record satellite feeds and monitor the transmitter(s). The description of an MCR given above usually refers to an equipment rack room, which is usually separate from the MCR itself. The term "studio" usually refers to a place where a particular local program is originated. If the program is broadcast live, the signal goes from the production control room to MCR and then out to the transmitter.

Camera control units

VTRs

Patch panels for reconfiguration of the wiring between the various pieces of equipment.

Other facilities

A television studio usually has other rooms with no technical requirements beyond program and audio monitors. Among them are:

One or more make-up and changing rooms

A reception area for crew, talent, and visitors, commonly called the green room.

Technical facilities**Telephone for live calls**

- Toll free numbers
- SMS
- Intercom

Computer for emails

- Feed back
- Opinion poll

Microphones

- Talk back
- Studio mic.
- Headphones

Emergency kit The tapes having pre-recorded programmes in case of emergency.

Generator facility The alternate supply in case of electric power failure.

Elements of a television system

An image source, This is the electrical signal representing the visual image, and may be from a camera in the case of live images, a video tape recorder for playback of recorded images, or a film chain-telescope-flying spot scanner for transmission of motion pictures (films).

A sound source, This is an electrical signal from a microphone or from the audio output of a video tape recorder or motion picture film scanner.

A transmitter, which generates radio signals (radio waves) and encodes them with picture and sound information.

An antenna coupled to the output of the transmitter for broadcasting the encoded signals.

An antenna to receive the broadcast signals.

A receiver (also called a tuner), which decodes the picture and sound information from the broadcast signals, and whose input is coupled to the antenna.

A display device, which turns the electrical signals into visual images.

An audio amplifier and loudspeaker, which turns electric signals into sound waves (speech, music, and other sounds) to accompany the images.

TV Production Overview

Of course, it's desirable to have audio and video equipment to work with – either personal equipment or equipment provided by the TV station...

Some equipment may not be available to you. That's okay; it's important to understand the equipment and techniques that are part of larger production facilities.

For one thing, you may suddenly be confronted with an internship or job opportunity where this knowledge is essential.

Camerapersons, writers, directors, producers, and even **on-camera talent** find that having a solid understanding of the tools and techniques of the entire process makes a major difference in the success of productions – not to mention their careers.

In television production, as in most of today's high-tech areas, knowledge is power.

Enough of the sales pitch. Let's get down to business.

A Bird's Eye View of the Production Process

Let's take a whirlwind tour of the production process; we'll come back to these people and places later. For now, let's take a quick look at the production process from the standpoint of the key people.

We'll start by thinking big -- big productions, that is -- because many of these things can be scaled down, combined, or eliminated in smaller productions.

Who Does What and Why

This list is long, but have you noticed the lengthy credit lists for major films and TV programs?

The person generally in charge of launching entire production is the **producer**.

He or she comes up with the program concept, lays out the budget for the production, and makes the major decisions. This person is the team leader, the one who works with the writers, hires the director, decides on the key talent, and guides the general direction of the production.

In smaller productions, the producer may also take charge of the more mundane activities. And in small productions, the director may handle the producer's responsibilities. In this case, the combined job title becomes producer-director.

Some productions may also have an associate producer who sets up schedules for the talent and crew and who generally assists the producer.

On a major production, one of the producer's first jobs is to hire a writer to write the Script (the document that tells everyone what to do and say). The script is like a written plan or blueprint for the production.

The producer will next consider the key talent for the production. In general, the talent includes actors, reporters, hosts, guests, and off-camera narrators -- anyone whose voice is heard or who appears on camera.

Sometimes talent is broken down into three sub-categories: actors (who portray other people in dramatic productions), performers (who appear on camera in non-dramatic roles), and announcers (who generally don't appear on camera).

In a large production, the producer will hire a director.

The director is in charge of working out *preproduction* (before the production) details, coordinating the activities of the production staff and on-camera talent, working out camera and talent positions on the set, selecting the camera shots during production, and supervising *postproduction* work.

In other words, once the producer sets things in motion, the director is in charge of taking the script from the beginning to the very end of the production process.

Assisting a director in the control room is typically a technical director who operates the video switcher. (A rather elaborate version is shown on the right.)

The technical director, or TD, is also responsible for coordinating the technical aspects of the production.

One or more production assistants (PAs) may be hired to help the producer and director. Among other things, PAs keep notes on ongoing production needs and changes.

The **lighting director (LD)** designs the lighting plan, arranges for the lighting equipment, and sets up and checks the lighting.

As we'll see, lighting is a key element in the overall look of a production.

Some productions have a set designer who, along with the producer and director, designs the set and supervises its construction, painting, and installation.

The makeup person, with the help of, for example, cosmetics and hair spray, sees that the talent look their best -- or worst, if that's what the script calls for.

Major dramatic productions have a wardrobe person who sees that the actors have clothes appropriate to the story and script.

The audio director or audio technician arranges for the audio recording equipment, sets up and checks mics (microphones), monitors audio quality during the production, and then strikes (another production term meaning disassembles and, if necessary, removes) the audio recording equipment and accessories after the production is over. (Mic, strangely enough, is pronounced mike.)

The microphone boom/grip operator watches rehearsals and decides on the proper mics and their placement for each scene. During an on-location (out-of-the-studio) shoot, this person may need strong arms to hold the mic boom over the talent for long periods of time.

The video recorder operator arranges video recording equipment and accessories, sets up video recordings, performs recording checks, and monitors video quality.

In dramatic productions, the continuity secretary (CS) carefully makes notes on scene and continuity details as each scene is shot to ensure that these details remain consistent among takes and scenes.

As we will see, this is a much more important job than you might think, especially in single-camera, on-location production. Once production concerns are taken care of, the continuity secretary is responsible for releasing the actors after each scene or segment is shot.

The CG Operator (electronic character generator operator) programs (designs/types in) opening titles, subtitles, and closing credits into a computer-based device that inserts the text over the video.

Camera operators do more than just operate cameras. They typically help set up the cameras and ensure their technical quality, and they work with the director, lighting director, and audio technician in blocking (setting up) and shooting each shot.

On a field (out-of-the-studio, or on-location) production, they may also coordinate camera equipment pickup and delivery.

Depending on the production, there may be a floor manager or stage manager who's responsible for coordinating activities on the set. One or more floor persons, or stagehands, may assist him or her.

After shooting is completed, the editors use the video and audio recordings to blend the segments together. Technicians add music and audio effects to create the final product.

The importance of editing to the success of a production is far greater than most people realize. As we will see, an editor can make or break a production.

LESSON 31**QUALITIES OF A NEWS PRODUCER**

A successful journalist, a flourishing newsman and a booming media practitioner has to know something of everything and in a way everything of something. They should have some knowledge of law, religion, war, science, business, politics, economics, trade and commerce.

S/he should be interested in philosophy, music, paintings, fine arts, and other cultural activities. In fact a producer general knowledge, because the more the general knowledge possesses, the better equipped, he or she will be for journalistic work.

A news producer should be a voracious reader of a newspaper, magazines, journals and periodical. In fact there is no end to knowledge and as far as the knowledge of a journalist is concerned, sky is the limit. Therefore the one should try to learn every new thing which comes in his way. He should have a very strong desire for learning new subjects and new things to increase the knowledge.

The following are the qualities and characteristics to be a news producer. Some of the qualities can be inculcated, some can be improved, but still there are certain qualities which are inborn and a person needs to have them to be a media man.

- **Determination**
- **Knowledge**
- **Awareness**
- **Imaginative**
- **Sense of humour and wit**
- **Inquisitiveness**
- **Sharp and active**
- **Curious**
- **Observation**
- **Social and sociable**
- **Active and Dynamic**
- **Well informed**
- **Courteous and well behaved**
- **Intelligence**
- **Specialized in the beat**
- **Law-abiding**
- **Qualified**
- **Creative and Innovative**
- **Decisive**

Determination

The news producer should have a resolution to dig out the details of an event in spite of the hurdles.

Knowledge

S/he should have an interest in current news and issues.

Awareness

S/he must have awareness of what all is happening around.

Imaginative

S/he should have a dynamic and imaginative mind and visualization power.

Sense of humour and wit

S/he should have good sense of humour.

Inquisitiveness

S/he should have inquisitiveness about news. S/he should have urge to know.

Sharp and active

Television is a fast kind of medium where the news can not be delayed and is to be put on air as early as the incident takes place. Owing to this limited and challenging time margin, the news producer needs to be very active, sharp, and prepared before hand.

Curious

A good news producer is one who has an ability to smell the news in any apparently normal and ordinary event. He needs to be curious about the things behind the curtain.

Observation

Unless a news producer's observation is sharp and outstanding, s/he is unable to smell something newsworthy in any happening.

Social and sociable

A good news producer is the one who enjoys a good repute in the society and cultivates healthy relations with officials of important status in almost all important departments and walks of life. His strong relations make him obtain news in time and without applying extra efforts.

Active and Dynamic

A news producer is the one who is always active and ready to be assigned any task of news gathering.

Well informed

A news producer is a man of information. He is not only supposed to have information about important happenings in the world, capitals of different countries, facts and figures of different national and international issues, national and international economic trends, but also it is imperative for him to have knowledge of the basics of almost all social sciences. A good news producer though can not be master of all, but he has to be the jack of all trades.

Courteous and well behaved

The profession a news producer has opted for, demands him to be sharp, active, shrewd and sometimes cunning as well but it does not imply at all that he is required to display ill-mannerism. He needs to be polite, well behaved, courteous, lively, refined and easygoing kind of person.

Intelligence

The news producer should be intelligent enough to make the right decision on the right times as the process of news production is a hectic and a challenging job.

Specialized in the beat

S/He should have familiarity with the area of his investigation

Law-abiding

Should know the code of ethics and be acquainted with the media norms.

Qualified

The news producer should be qualified from a recognized educational institution; normally they are masters in Mass Communication, Media studies or communication studies.

Creative and Innovative

The creativity is the uniqueness of media and a producer should be able to create new ideas in production and to innovate from the existing material.

Decisive

The gathering of news, preparation of bulletins and presentation of newscast is a job of meeting hard deadlines so and deciding.

LESSON 32**DUTIES OF A NEWS PRODUCER**

Here are some of the things that a news producer does.

1. Decides which stories are covered, who covers them, and how they are covered.
2. Decides the order in which stories appear in the newscast
3. Determines the amount of time each story is given.
4. Writes copy for some stories.
5. Integrates live reports into the newscasts.

Points to ponder while making a special bulletin

1. Start strong as well begun is half done.
2. Read and understand your source copy.
3. Underline and circle the key facts.
4. Think don't write yet.
5. Write the way you talk.
6. Have the courage to write simple.
7. Refrain from wrong warm-ups.
8. Limit a sentence to one line only.
9. Use short words and sentences.
10. Utilize familiar words and combinations.
11. Humanize your copy and localize it.
12. Do not start with quotation or question.
13. Put word or words you wish to stress at the end of your sentences.
14. Omit needless words from your copy.
15. It should highlight the best part.
16. Don't just duplicate your source copy.
17. When in doubt, leave it out.
18. Don't raise questions, you do not answer.
19. Read your copy loudly and if it does not sound good, rewrite it.
20. The art of making news lies in rewriting what you have already written.

LESSON 33**ASSIGNMENT/NEWS EDITOR**

The assignment editor is one who assigns and monitors the activities of **reporters, camera crew** and other people in the field, works closely with the news producer. Since speed is important in telecast news, there is great pressure on the assignment editor to get crews to the story in the shortest amount of time.

Then of course, there are the glamour jobs like on-air reporters and anchors. Most reporters in telecast news function as general assignment reporters, although the large market stations might have one or two regularly assigned to a beat, such as the entertainment scene. In many stations, anchors occasionally do the field reports, but most of the times they perform their work in the studios, preparing the upcoming newscast.

In addition to people seen on camera, there are quite a few workers whom no one sees or hears. Photographers or cameramen accompany reporters to shoot the videos. **Tape editors** trim the footage into the segments that fit within the time allotted to the story. Big stations also have news writers and production assistants who pull slides and arrange other visual needed during the news cast.

Obviously the chain of gatekeepers in the telecast news is a long and complicated one, starting from the assignment editor and ending with the anchor, usually more than a half-dozen people have some say, so over the final shape of the newscast.

Sometimes, the way a story ends up might be drastically different from the way it started at the beginning of the gatekeeper chain, it is not unusual for a reporter to work all day on a story and then be told by a producer that the story will get only seconds of airtime.

News editor is one who supervises all the producers in the news room. Typically producers are assigned to the **early morning, morning, noon, evening, night**, and **late-night** newscast. In addition to looking after the producer, **News editor** might also produce the evening news, typically the stations most important programme.

Organization of a TV news room

News director
Executive producer
Assignment editor
 Producers
 Reporters
Editors

An assignment editor has to take care of all the preparation of news, so while writing news following points should be remembered.

Accuracy

The first essential of news writing is accuracy.

Fairness and Reliability

Every reporter should remember that a news channel reputation for fairness and reliable rests upon an accurate presentation of the facts.

Factual position

The number and class of people who would be interested in them as well as the need for telecasting them while they still have news value should also be kept in mind.

Nearness and proximity

The geographical nearness of an event does add to interest.

Conflict

The readers have a lot of interest in all sorts of conflict or contests.

Suspense and mystery

The suspense and mystery also keeps the viewers glued to the television channels.

Oddity and novelty

The odd and novel news items have more human interest.

Prominence

The big names make big news, is the key rule while selecting the news items.

Consequence

The result of a particular event on public or a specific group of people makes the news mention-worthy.

LESSON 34

SHOOTING A NEWS FILM**News Production**

If there's a war, a disaster, or a major civil disturbance somewhere in the world, television news will be there. Electronic newsgathering or ENG technology can make us all eyewitnesses to happenings.

Those who produce TV news and documentaries collectively hold the keys too much power and influence. For this reason we'll spend some time investigating this television genre.

Although the printed word can be powerful, as we've so often seen in the last 50 years, seeing *images*, especially on TV, makes happenings much more *real*.

At the same time, keep in mind that George Lucas, one of the most successful producers of all time, said, "It's very foolish to learn the *how* without the *why*."

In news and documentary work the "why"-- the context of what we are seeing -- is especially important.

The major news organizations now assemble a wide range of live video, audio reports, photography collections, animated weaponry displays, and interactive maps for Internet users.

The Difference between ENG and EFP

Electronic newsgathering (ENG) is a part of electronic field production (EFP).

Although in all-digital operations we're starting to see the initials DNG used for digital newsgathering, we'll stick to "ENG" for this discussion.

Electronic Field Production (EFP) includes many other types of field productions, including commercials, music videos, on-location dramatic productions, and various types of sports coverage. EFP work generally provides the opportunity to insure maximum audio and video quality.

In ENG work the primary goal is to get the story. In 90% of news work there will be time to insure audio and video quality, which is what the news director and producer will expect.

But conditions are not always ideal in news work, and if compromises must be made they are made in audio and video quality, not in story content.

The most-watched and celebrated television news story in history was shot with one low-resolution black-and-white video camera -- not the quality of video that you would think would make it to every major TV network in the world.

The video was of mankind's first steps on the moon.

Although the quality of the footage was poor, no TV news editor said to NASA, "You've got some interesting footage there, NASA, but we'll have to pass; the quality just doesn't meet our technical standards."

In democratic society news and documentaries also serve an important "watchdog" function. Not only do they tend to keep politicians and other officials honest, but they have also brought to light countless illegal activities. Once such things become public knowledge, corrective action often follows.

Whenever the people are well informed, they can be trusted with their own government.

--Thomas Jefferson

The Influence of telecast News

We can more fully appreciate the power and influence of TV news when we consider the lengths to which some people and nations go to control it.

As we have seen countless times, the news media are the first target for those who want to control the people of a country.

Although censorship is often justified as a way of protecting values or ideals, history has repeatedly shown that censorship leads to a suppression of ideas and often to political, military and religious control.

Today, there are many countries that censor, or at least try to censor, broadcast news, books, magazines, and the Internet. Although the stated justification is often to protect moral values, the list of censored materials sometimes includes the web pages of newspapers as well. One can draw own conclusions about the real intent.

Thus, stories that will grab and hold an audience are favored over those that in the long run may be much more consequential. Stories that are "visual" are favored over those that are static and more difficult to explain or understand.

A baby beauty contest or a dog show may win out over coverage of a city council meeting or an international trade conference.

Given the preferences of viewers who are constantly "voting" on program popularity with their TV remote controls, a news director whose job largely depends on maximizing ratings and station profits, may have little choice but to appeal to popular tastes.

As media conglomeration spreads with more and more media outlets being owned by several huge corporations, news is emanating from fewer and fewer sources.

Even now it's alleged that corporate self-interest shapes decisions on what will and will not be covered. At the same time, news is very competitive and outlets that bypass or downplay certain stories because they may negatively impact advertising profits or corporate prestige may find that their credibility drops with viewers. This route is unwise, if for no other reason, because it will eventually impact news ratings and, subsequently, profits.

But, there is also this: Most people get most of their news from their favorite TV news station. If TV news bypasses certain stories because they may be unpopular or not easily understood, the viewers may never know. (How can you miss something if you don't know about it in the first place?)

Handling Controversial Subject Matter

When handling controversial subject matter broadcast television is different from many of the feature films noted above because it must attempt to show balance.

Part of your responsibility as a newscaster is to bring out the various sides of an issue. This means you allow each side to state their views as strongly and convincing as they can. Not only is it the professional thing to do, but it will also add interest and controversy to your news stories.

If you keep an open mind right from the beginning, you may uncover facts that put issues in a whole new light. Again, speaking from many years of experience in news, I often found that my initial views on issues dramatically changed after I uncovered facts that were not commonly known.

In speaking to potential spokespersons for TV news pieces you need to explain the nature of the story. You also want to carefully document your attempts at finding opposing views. This will protect you both legally and professionally.

In news pieces you have to rely on the telephone to set up interviews. If key people refuse comment or refuse to be interviewed, some producers send these people registered letters so after the piece is aired they can't suddenly say they didn't understand what was going on, or that they were denied the opportunity to present their side.

At the same time, keep in mind that when an issue is being litigated an attorney might restrain them from commenting, a fact that should also be mentioned.

Like Any Good Scout, Be Prepared

Most major news stories come up unexpectedly, and it's the reporter-video grapher (cameraman) who's prepared to get to the scene of the news first that has the best chance of getting the story on the air first. "Scoops" of this sort can rapidly advance a career.

First, this means having a checklist of essential equipment drawn up so that you won't forget anything in the rush to get out the door. (There are many sad stories about crews driving 50 to 100 miles, only to discover they forgot to bring along an essential piece of equipment.)

Have batteries charged and all cameras and equipment ready to transport at a moment's notice.

Things happen very fast in a breaking story, so when you arrive on the scene, you should be able to start recording within a few seconds.

LESSON 35

PREPARATION OF SPECIAL REPORTS

Investigative journalism**Uncovering Truth**

Ultimately, the job of the journalist — especially the investigative journalist — is to uncover the truth about situations and explain that truth to an audience in a clear and succinct manner.

Even when there seems to be a major injustice involved, it is not the responsibility of the reporter to be an advocate of a particular viewpoint, only to bring all of the related facts to the public's attention. In the case of complex stories and situations, this does not exclude the necessary interpretation of the facts.

In mid-2002 two major stories were reported in the U.S. press: the molestation of hundreds of children by clergy and the largest corporate bankruptcy in U.S. history. In both cases the incriminating facts had been successfully hidden from the public as the situations continued to get progressively worse.

Had the truth been uncovered and publicized earlier, something could have been done to head off the pain and suffering that a great many people had to subsequently endure.

This includes the many additional children who were molested and the scores of people who lost all of their retirement funds while some corporate executives pocketed millions of dollars.

In both cases it was the journalist's job to uncover the facts that people were rather successfully hiding and bring these facts to the public's attention; in other words, to fulfill their role as "the watchdogs of a democratic society." Generally, public exposure is all that is needed to initiate corrective action.

Reportage sometimes refers to the total body of media coverage of a particular topic or event, including news reporting and analysis: "the extensive **reportage** of recent events in x." This is typically used in discussions of the media's general tone or angle or other collective characteristics.

Reportage is also a term for an eye-witness genre of journalism: an individual journalist's report of news, especially when witnessed firsthand, distributed through the media. This style of reporting is often characterized by travel and careful observation.

Literary reportage (pronounced ray-por-taj) is the art of blending documentary, reportage-style observations, with personal experience, perception, and evidence, in a non-fiction form of literature. This is perhaps more commonly called creative nonfiction and is closely related to New Journalism. The prose of such reporting tends to be more polished and longer than in newspaper articles.

Investigative journalism is when reporters deeply investigate a topic of interest, often involving crime, political corruption, or some other scandal.

There is no more important contribution that we can make to society than strong, publicly-spirited investigative journalism. – Tony Burman, editor-in-chief of CBC News.

De Burgh (2000) states that: "An investigative journalist is a man or woman whose profession it is to discover the truth and to identify lapses from it in whatever media may be available. The act of doing this generally is called investigative journalism and is distinct from apparently similar work done by police, lawyers, auditors and regulatory bodies in that it is not limited as to target, not legally founded and closely connected to publicity".

An investigative journalist may spend a considerable period researching and preparing a report, sometimes months or years, whereas a typical daily or weekly news reporter writes items concerning immediately available news. Most investigative journalism is done by newspapers, wire services and freelance journalists. An investigative journalist's final report may take the form of an exposé.

The Investigation

The investigation will often require an extensive number of interviews and travel; other instances might call for the reporter to make use of activities such as surveillance techniques, analysis of documents, investigations of the performance of any kind of equipment involved in an accident, patent medicine, scientific analysis, social and legal issues, and the like.

Investigative journalism requires the scrutiny of details, fact-finding, and physical effort. An investigative journalist must have an analytical and incisive mind with strong self-motivation to carry on when all doors are closed, when facts are being covered up or falsified and so on.

Some of the means reporters can use for their fact-finding:

- Studying neglected sources, such as archives, phone records, address books, tax records and license records.
- Talking to neighbors.
- Using subscription research.
- Anonymous sources.

Investigative journalism can be contrasted with analytical reporting. According to De Burgh (2000) analytical journalism takes the data available and reconfigures it, helping us to ask questions about the situation or statement or see it in a different way, whereas investigative journalists go further and also want to know whether the situation presented to us is the reality.

Consequences

Consequences for society as a whole include:

- revision of institutional policies
- changes in the law

Some of the potential consequences for the subjects of successful investigative journalism include:

- loss of job
- loss of professional accreditation
- payment of fines
- indictment and conviction
- loss of personal and professional reputation
- critical consequences for family members/associates involved in unrelated criminal acts discovered through the process of investigation

Professional references

In *The Reporter's Handbook: An Investigator's Guide to Documents and Techniques*, Steve Weinberg defined investigative journalism as:

Reporting, through one's own initiative and work product, matters of importance to readers, viewers or listeners. In many cases, the subjects of the reporting wish the matters under scrutiny to remain undisclosed. There are currently university departments for teaching investigative journalism. Conferences are conducted presenting peer reviewed research into investigative journalism.

Breaking news is a current event that broadcasters feel warrants the interruption of scheduled programming in order to report its details. Its use is often loosely assigned to the most significant story of the moment or a story that is being covered live. It could be a story that is simply of wide interest to viewers and has little impact otherwise.

Format

The format of a special report or breaking news event on television commonly consists of an opening graphic, featuring music which adds an emphasis on the importance of the event. This is usually

followed with the introduction of a news anchor, who welcomes the viewer to the broadcast and introduces the story at hand.

Once the story is introduced, the network may choose to continue to show a live shot of the anchor or may cut away to video or images of the story that is being followed during the broadcast. Additionally, the coverage may be passed to a reporter at the location of the breaking event, possibly sharing more information about the story as it breaks.

Depending upon the story being followed, the report may last only a few minutes, or continue for multiple hours at a time. If coverage continues for an extended amount of time, the network may integrate analysis about the story through analysts in-studio, via. Phone, satellite, or through other means of communication.

When the coverage comes to a close, the network may either resume programming that was occurring prior to the event or begin new programming, depending upon the amount of time spent on the coverage.

Usage

While in the past programming interruptions were restricted to extremely urgent news, such breaks are now common at 24-hour news channels which may have an anchor available for live interruption at any time. Some networks largely emphasize this, even advertising the station as being "first for breaking news".

The term breaking news has come to replace the older use of news bulletin. There has been widespread use of breaking news at the local level, particularly when one station in a market wants to emphasize the exclusivity of coverage. Not all viewers agree that stories assigned breaking news rise to the significance or level of interest that warrant such a designation.

Criticism

When a network begins coverage of a breaking story, the early details about the stories are commonly sketchy, usually due to the limited amount of resources available to the reporters for information during the time the story initially breaks.

Another criticism has been the **diluting** of the importance of breaking news by the need of 24-hour news channels to fill time, using the title when covering any number of soft news stories.

Know Your Story

Before shooting it's vital that you know the whole story and how your sequence fits into it. Story summaries are one tool you can use to ensure you don't lose the plot. If you have time, pictures and storyboards can help to visualise your ideas.

- How to do it
- Decide the story's angle.
- Write a summary or sketch storyboards.
- However "last minute" the shoot, make sure you have a clear brief.
- Check that what you're doing is realistic in the time available - don't compromise your safety.
- Unforeseen events can occur - be ready to react if the story changes, and follow new developments.
- Remind yourself "I will always focus on telling the story".

Covering News vs. Making News

Scientists say that when you observe an event you in some way change it. Leaving the esoteric concepts of theoretical physics aside, we know that the presence of news reporters and cameras not only changes events, but it can even create news.

At Times, a Dangerous Profession

In the many countries, reporters have been killed before their stories could be aired. Numerous books and articles document this.

Although some of these authors might be seen as "conspiracy theorists," the death of journalists and scores of informants on the eve of important revelations can't all be viewed as coincidence.

According to the Committee to Protect Journalists, between 1992 and 2001, 399 journalists were killed "because of their work." By 2007, more than 100 journalists had been killed in the Iraq and Afghanistan wars. In the last decade years more than 1,000 journalists have been killed around the world.

Suffice it to say, investigating and breaking important stories often carries a degree of professional and personal risk. At the same time, this is the way awards are won and professional careers are advanced — and, far more importantly, wrongs are rectified and needed social change is instituted.

News and Politics

Most of the nation's newspapers and magazines and television stations, seeking greater profits through larger audiences, fed the public a diet of crime news, celebrity gossip, and soft features, choosing to exclude more serious topics that news managers feared would not stimulate public attention.

CNN Journalist Peter Arnett, with one explanation as to why Americans tend to be less informed about world events than citizens of many other countries.

At the same time we need to put some things into perspective.

For many years TV has represented the number one source of news and information for the vast majority of people in industrialized nations.

When a scandal is uncovered in a news show, we often see action taken. When the spotlight of TV scrutiny is focused on a problem in a distant land, and there is public outrage, we often see steps taken to correct things. This is the reason that third-world despot's fear, and have taken great measures to ban, the press, in general, the TV news in particular.

Does not the fear of exposure keep many on a nobler path?

Often the news isn't pleasant. As the bearer of some unpopular messages TV news has generated many critics. In fact, TV news probably gets more complaints than any other type of programming, especially from those who want to believe "a different truth."

Many longtime professionals remember a time when newspapers and electronic journalism were held in much higher esteem — primarily because there was a "high wall" separating news departments and bottom-line corporate interests.

It appears that the drop in credibility has impacted where people are getting their news.

LESSON 36**INTERVIEWS, VOX POPS AND PUBLIC OPINIONS****Setting Up A Typical On-Location News Interview**

For better or worse, interviews are the basic staple of news and documentaries.

There are two basic ways of handling an interview: one designed for an extended interview and one for a short interview segment, the kind that is typical for TV news.

1. For an extended interview you could start out by lighting and micing the set for the "A" and "B" camera positions at the same time and set up cameras in the A and B.

The position B camera can then get close-up shots of the reporter and over-the-shoulder shots with the back of interview subject. Even when the person being interviewed is speaking, this will provide reporter reaction shots and shots that can be used as insert shots to cover edits in the dialogue of the person being interviewed.

Camera position A may be focused on the person being interviewed and provides the same type of shots from this angle.

During editing you always have the choice of two camera angles, which means you have much more creative control. Even so, this approach requires much more set-up time for shooting the interview and editing time to put it together.

2. For a short interview it's easier and takes less equipment to first light and mic camera position "A." Then after you get all of your A-roll footage, move the camera to position "B," mic the reporter, and move your lights to the appropriate position for this (reverse) angle.

In the latter case the camera is first set up in position "A" and focused on the interview subject. The reporter asks all of his or her questions and the responses are recorded on what we've called an "A-roll." Note that both close-ups and over-the-shoulder shots are possible from this angle.

Then the camera is moved to position "B." With the camera focused on the reporter, all of the questions are then asked over again.

This time, however, the interview subject does not answer the questions. In fact, if you can do without the over-the-shoulder shots, the interview subject doesn't even have to be there at all. The reporter simply looks at a "spot on the wall" behind where the person was sitting and re-asks the questions.

Remember that a five- to eight-second pause should separate each question, especially if you are using videotape. Reporter reaction shots or "noddies," are also recorded from this angle.

During editing, the goal will be to condense things as much as possible and still remain true to the subject's answers. When you cut out an unnecessary segment of an answer, you can cover the resulting jump cut with a "noddie," an insert shot, or a cutaway.

For short questions, you might to opt to eliminate the shot of the reporter and simply use the audio of the reporter's original question while holding a shot on the person being interviewed.

Sometimes a reporter's question will be obvious in an answer and you can save time by not using the question. Remember, the faster you can move things along without sacrificing clarity, the better.

One of the most difficult aspects of editing an interview, especially when considerable editing and rearranging has to be done, is to achieve smooth linking from one audio segment to the next. This includes preserving the brief pauses that normally occur in conversation.

Although editing approaches differ, for interviews most editors first concentrate on audio. Once they have a tightly edited "radio program," they go back and cover the video jump cuts with insert shots, reaction shots, and cutaways.

Reporter's Checklist

Broadcast news is a highly competitive business and in the rush to get a story on the air it's sometimes tempting to guess at facts or use information from a questionable source.

However, errors in stories not only damage a station's credibility but they can derail a reporter's professional future. Here are five points to keep in mind when writing news stories.

1. Question those who claim to be a witness to an event and confirm that they really were in a position to see what happened.
2. Use a second source to double-check information that seems surprising or may be in doubt.
3. Double-check all names, titles, and places, and, when necessary, write out the pronunciation of names phonetically.
4. When writing the story, carefully check spelling and grammar; do the math on numbers.
5. Make sure that sound bites selected during editing accurately reflect what the person meant.

News Producer's Checklist

Once reporters turn in their stories and a news producer or director takes over, many decisions must still be made before the stories are ready for broadcast.

Among other things, the stories must be reviewed for balance, lead-ins (story introductions) must be written, and appropriate graphics must be prepared to support the stories.

Here are five points that should be considered before the newscast goes on the air.

1. Review stories for a balance in views, gaps, and missing information.
 2. Double-check phone numbers by calling them; double-check web addresses by visiting the sites. (People are known to get very upset if their telephone number is erroneously given out and they have nothing to do with the issue.)
 3. Check graphics for accuracy.
 4. Make sure the lead-ins to stories and related news promos accurately reflect the content and nature of the stories.
 5. Step back and view the overall newscast and make sure that the most important stories of the day have been covered and that they accurately reflect the most current information and developments.
- Do reporters sometimes get things wrong? Certainly. Not only do they have human frailties, but are they are fighting deadlines and constant pressure to beat the competition.

News Bias

Conservatives think that TV news has a liberal bias and liberals feel that news has a conservative bias. Being a human endeavor, total objectivity in news is impossible, of course. When you analyze bias complaints you are apt to conclude that *bias* is defined as "any view that differs from mine."

Although the media is often seen as having a liberal bias, it has been shown that most of the large broadcast operations are owned or managed by individuals who, almost without exception, hold views that are politically and socially to the right of center.

Bias can stem just as much from what TV news reports as what it doesn't report.

When it comes to politics, great effort goes into trying to keep certain things from becoming public. For example, it has been well documented that many embarrassing government documents that have nothing to do with national security are marked "classified" simply to keep the information from the public.

To help address this issue The Freedom of Information Act allows citizens and reporters access to some government documents.

Although the process of obtaining documents can be fraught with red tape and delays, and key information is often blacked out, passage of The Freedom of Information Act represented a major step forward for investigative journalism.

Various independent agencies monitor the media for bias.

INTERVIEW

An **interview** is a conversation between two or more people (the interviewer and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee. Interviews can be divided into two rough types, interviews of assessment and interviews for information.



Assessment

The most common type of interview for assessment is a job interview between an employer and an applicant. The goal of such an interview is to assess a potential employee to see if he/she has the social skills and intelligence suitable for the workplace. Similar interviews are also used for admissions to schools, allotment of grants, and other areas.

In most developed countries, rules and regulations govern what can be asked in these interviews. Highly personal questions and those unrelated to the job at hand are forbidden, as are questions which invite discrimination. However some interviewers tend to ask such questions in order to see how the interviewee reacts and if (s)he is able to elegantly avert the question.

Information

The second class of interviews are those seeking to gather information about a subject. These types of interviews are central to the practices of **journalism** and **instructional** design. Such interviews are also important to any non-fiction writer or researcher. In general the quotes and information gathered in these interviews are used in a publication or edited for broadcast.

Such interviews occur only because the subjects have some interest in being interviewed. There are four main reasons why subjects agree to be interviewed:

Ego - The desire to be on television and to have one's opinions aired is a strong one-to-many. Many people enjoy talking about themselves and their lives.

Publicity - Politicians and celebrities are dependent on publicity for their success and an interview is free advertising. As such many subjects insist upon prominent mentions of their latest book or movie in the interview. Such promotional interviews are frequently required by contracts.

Money - The issue of whether reporters should pay for interviews is a controversial one. Analysts and experts are almost always paid, and this is often an important source of income to them. Most media

outlets have rules against paying eyewitnesses for interviews, in part because this only encourages the fabrication of fraudulent stories in the hopes of being paid. A major exception to this are some **tabloids**, especially British tabloids. Other media outlets often wine and dine sought after subjects and give them other such perks.

Helpfulness - many subjects agree to an interview simply to help the reporter. This is true of most eyewitnesses and help explain why many famous individuals agree to grant interviews for items such as school papers.

Even after an interview has been granted the subject normally imposes conditions. Almost all interviews have a time limit. The greater the fame and importance of a subject the more limitations they demand. These includes subject matters that are off limits, a veto over the final piece, or even a full list of questions provided in advance. Some politicians, notably Helmut Kohl (Germany), have avoided giving interviews to the press, whereas many others consider this a necessary aspect of political campaigning.

There are several other rules to interviews. If a subject declares that what they say is "**off the record**" a reporter is not supposed to use such information. If material is "**Background**" the material can be used but its source cannot be mentioned, if it is "**deep background**" then the information cannot be used on its own, and can only confirm information already obtained from another source. A subject may also declare that their comments should have no "**attribution**." In such cases the name of the subject cannot be mentioned, but they should simply be referred to as "a source in ".

These rules are unwritten and in the past reporters have broken them. However if a journalist published material that was off the record they are unlikely to be able to use that source again. They are known as a "**burnt source**." Moreover news of such betrayals spreads and a reporter may have trouble with other sources.

The tone of an interviewer is also important. Tough interviewers that are honest and forthrightly pose important and difficult questions are appealing to audiences, but not to subjects. An interviewer that develops a reputation for such aggressiveness may soon find it difficult to convince subjects to sit for an interview. A subject that is offended during an interview may put an early halt to the discussion. Politicians, celebrities, and experts on certain subjects are frequently interviewed. Sometimes interviews are ended early (usually by the interviewee). Well known **investigative journalists** can often get interviews only under false pretenses. Conversely, an interviewer that asks only "soft" questions will lose the respect of audiences and colleagues.

The ideal interview is considered to be a face to face one. Most newspapers order reporters to specifically mention that an interview was conducted by **telephone** or **e-mail**.

LESSON 37**BACK GROUND VOICE AND VOICE OVER****Natural or Raw Sound**

"Raw Sound" is recorded sound that is not of a newsmaker speaking, such as the sound of an airplane landing or a marching band playing or a crowd cheering; sometimes known as "Natural Sound" or "Original Sound", as well as "Wild sound" especially when the source of the sound is from nature.

Sound Effects

The especially recorded sounds to establish a particular atmosphere are called sound effects. For instance, Birds' chirping, typewriter's rattling, jackal's howling, Lion's roaring, chairs' dragging, water pouring into glass, thunder of clouds followed by rain sound etc.

The mixing

The audio mixing is to add music and sound effects to a television programme during post production. In music the process of mixing track and the singer's voice is called mixing. While mixing the producer must be careful that instrumental level must not exceed vocalist.

Voice-over

The term voice-over refers to a production technique where "a disembodied voice is broadcast live or pre-recorded in radio, television, film, theater and/or presentation". The voice-over may be spoken by someone who also appears on-screen in other segments or it may be performed by a specialist voice actor.

Voice-over is also commonly referred to as "off camera" commentary. The term **voice-over** can also refer to the actual voice actor who performed the recording. The terms voice actor, narrator, voice artist, announcer are all similarly used.

Types and uses of voice-over

- As a character device
- As a creative device
- As an educational or descriptive device
- As a commercial device

As a character device

Directors may add a voice-over late in the production because the plot or a character's motivation is not immediately clear; for instance Francis Ford Coppola added voice-overs of Captain Willard's character in Apocalypse Now to clarify Willard's thoughts and intentions. In the 1956 film version of Herman Melville's Moby Dick, Richard Basehart, as Ishmael, narrates the story and sometimes comments on the action in voice-over, as does William Holden in the films Sunset Boulevard and The Counterfeit Traitor.

Voice-over technique is likewise used to give voices and personalities to animated characters. The most noteworthy and versatile of whom include Mel Blanc, Don Messick and Daws Butler.

As a creative device

In film, the filmmaker places the sound of a human voice (or voices) over images shown on the screen that may or may not be related to the images being shown. Consequently, voiceovers are sometimes used to create ironic counterpoint. Also, sometimes they can be random voices not directly connected to the people seen on the screen.

In works of fiction, the voice-over is often by a character reflecting back on his or her past, or by a person external to the story who usually has a more complete knowledge of the events in the film than the other characters. Voice-overs are often used to create the effect of storytelling by a

character/omniscient narrator. For example, in *The Usual Suspects*, the character of Verbal Kint has voice-over segments as he is recounting details of a crime.

Other examples of storytelling voice-overs can be seen *The Shawshank Redemption* and *Big Fish*. The genre of film noir is especially associated with the voice-over technique. In radio, voice-overs are an integral part of the success of the radio programme. Although the announcer holds the prestige and claims all the glory, it is the voice-over artist that is the real drive behind the show. For example, David M. Green's *Summer Pow-Wow* and his voice-over artist, Tim Wray.

As an educational or descriptive device

The voice-over has many applications in non-fiction as well. Television news is often presented as a series of video clips of newsworthy events, with voice-over by the reporters describing the significance of the scenes being presented; these are interspersed with straight video of the news anchors describing stories for which video is not shown.

Television networks such as The History Channel and the Discovery Channel make extensive use of voice-overs. Live sports broadcasts are usually shown as extensive voice-overs by expert announcers over video of the sporting event. Game shows formerly made extensive use of voice-overs to introduce contestants and describe available or awarded prizes, but this technique has diminished as shows have moved toward predominantly cash prizes.

Voice-over commentary by a leading critic, historian, or by the production personnel themselves is often a prominent feature of the release of feature films or documentaries on DVDs.

As a commercial device

The commercial use of voice-over in advertising has been popular since the beginning of radio broadcasting. In the early years, before effective sound recording and mixing, announcements were produced "live" and at-once in a studio with the entire cast, crew and, usually, orchestra. A corporate sponsor hired a producer, who hired writers and voice actors to perform comedy or drama.

The industry expanded very rapidly with the advent of television in the 1950s and the age of highly produced serial radio shows ended. The ability to record high-quality sound on magnetic tape also created opportunities, as has the proliferation of home computers capable of recording, often using inexpensive (even free) software and a microphone of reasonable quality.

The **human voice** consists of sound made by a human using the vocal folds for talking, whispering, singing, laughing, crying, screaming, etc. The vocal folds, in combination with the lips, the tongue, the lower jaw, and the palate, are capable of producing highly intricate arrays of sound. The tone of voice may be modulated to suggest emotions such as anger, surprise, or happiness. Singers use the human voice as an instrument for creating music.

Voice types and the cords themselves

Men and women have different vocal cord sizes; adult male voices are usually lower-pitched and have larger cords. The male vocal cords are between 17 mm and 25 mm in length. Matching the female body, which on the whole has less muscle than the male, females have smaller cords. The female vocal cords are between 12.5 mm and 17.5 mm in length.

The cords are located just above the trachea (the windpipe which travels from the lungs). Food and drink does not pass through the cords but is instead taken through the esophagus, an unlinked tube. Both tubes are separated by the epiglottis, a "flap" that covers the opening of the trachea while swallowing. When food goes down through the cords and trachea (usually happens when the person inhales while swallowing) it causes aspiration (choking). Cords in both sexes are ligaments within the larynx. They are attached at the back (side nearest the spinal cord) to the arytenoids cartilages, and at the front (side under the chin) to the thyroid cartilage. Their outer edges are attached to muscle in the

larynx while their inner edges or "margins" are free (the hole). They are constructed from epithelium, but they have a few muscle fibers on them, namely the vocalist muscle which tightens the front part of the ligament near to the thyroid cartilage. They are flat triangular bands and are pearly white in colour—whiter in females than they are in males. Above both sides of the vocal cord (the hole and the ligament itself) is the vestibular fold or *false vocal cord*, which has a small sac between its two folds (not illustrated).

The difference in vocal cord size between men and women means that they have differently pitched voices. Additionally, genetics also causes variances amongst the same sex, with men and women's singing voices being categorized into types. For example, among men, there are basses, baritones and tenors, and altos, mezzo-sopranos and sopranos among women. There are additional categories for operatic voices, see voice type.

Vocal registration

The human voice is capable in most cases of being a complex instrument. Humans have vocal folds which can loosen or tighten or change their thickness and over which breath can be transferred at varying pressures. The shape of chest and neck, the position of the tongue, and the tightness of otherwise unrelated muscles can be altered. Any one of these actions results in a change in **pitch**, **volume**, **timbre**, or tone of the sound produced.

One important categorization that can be applied to the sounds singers make relates to the *register* or the "voice" that is used. Singers refer to these registers according to the part of the body in which the sound most generally resonates, and which have correspondingly different tonal qualities. There are widely differing opinions and theories about what a register is, how they are produced and how many there are. The distinct change or break between registers is called a *passaggio* or a *ponticello*. The following definitions refer to the different ranges of the voice.

Sound

Sound is what can be perceived by a living organism through its sense of hearing. Physically, sound is vibrational mechanical energy that propagates through matter as a wave. For humans, hearing is limited to frequencies between about 20 Hz and 20000 Hz, with the upper limit generally decreasing with age. Other species may have a different range of hearing.

As a signal perceived by one of the major senses, sound is used by many species for detecting danger, navigation, predation, and communication. In Earth's atmosphere, water, and soil virtually any physical phenomenon, such as **fire**, **rain**, **wind**, **surf**, or **earthquake**, produces (and is characterized by) its unique sounds. Many species, such as frogs, birds, marine and terrestrial mammals, have also developed special organs to produce sound.

In some species these became highly evolved to produce song and (in humans) speech. Furthermore, humans have developed culture and technology (such as music, telephony and radio) that allows them to generate, record, transmit, and broadcast sounds. The mechanical vibrations that can be interpreted as sound can travel through all forms of matter: gases, liquids, solids, and plasmas.

However, sound cannot propagate through vacuum. The matter that supports the sound is called the medium. Sound is transmitted through gases, plasma, and liquids as longitudinal waves, also called compression waves. Through solids, however, it can be transmitted as both longitudinal and transverse waves.

Sound is further characterized by the generic properties of waves, which are frequency, wavelength, period, amplitude, intensity, speed, and direction (sometimes speed and direction are combined as a velocity vector, or wavelength and direction are combined as a wave vector). Transverse waves, also known as shear waves, have an additional property of polarization.

Sound characteristics can depend on the type of sound waves (longitudinal versus transverse) as well as on the physical properties of the transmission medium. Sound propagates as waves of alternating pressure deviations from the equilibrium pressure (or, for transverse waves in solids, as waves of alternating shear stress), causing local regions of compression and rarefaction.

Matter in the medium is periodically displaced by the wave, and thus oscillates. The energy carried by the sound wave is split equally between the potential energy of the extra compression of the matter and the kinetic energy of the oscillations of the medium. The scientific study of the propagation, absorption, and reflection of sound waves is called acoustics.

Noise is often used to refer to an unwanted sound. In science and engineering, noise is an undesirable component that obscures a wanted signal.

Speed of sound

The speed of sound depends on the medium through which the waves are passing, and is often quoted as a fundamental property of the material. In general, the speed of sound is proportional to the square root of the ratio of the elastic modulus (stiffness) of the medium to its density. Those physical properties and the speed of sound change with ambient conditions.

For example, the speed of sound in gases depends on temperature. In air at sea level, the speed of sound is approximately 343 m/s, in water 1482 m/s (both at 20 °C, or 68 °F), and in steel about 5960 m/s. The speed of sound is also slightly sensitive (a second-order effect) to the sound amplitude, which means that there are nonlinear propagation effects, such as the production of harmonics and mixed tones not present in the original sound.

Equipment for dealing with sound

Equipment for generating or using sound includes musical instruments, hearing aids, Sonar (Sound Navigation Radar) systems and sound reproduction and broadcasting equipment. Many of these use electro-acoustic transducers such as microphones and loudspeakers.

Television Sound: The Basics

Until rather recently, far more attention was paid to video in television than to audio. "Good sound" was when you could make out what was being said; "bad sound" was when you couldn't.

This has changed and now audiences have much greater expectations. Before we can discuss some of the basic audio production concepts, sound itself must be understood.

Sound has two basic characteristics that must be controlled: loudness and frequency.

Loudness

Although sound loudness is commonly measured in decibels (dBs), that term actually refers to two different things.

First is dBSPL (for sound pressure loudness), which is a measure of acoustic power. These are sounds we can directly hear with our ears.

Musicians who must be around high-level sound *use* musician's plugs -- special earplugs that attenuate sound level without distorting the frequency range.

These decibels go to and beyond 135, which is considered the threshold of pain and, by the way, the point at which permanent ear damage can occur. If your ears "ring" after being around a loud sound, this should be a warning sign that you have crossed the threshold of potential hearing damage. (The damage, which is irreversible, often goes unnoticed, which probably explains why the average 50-year-old in some countries has better hearing than many U.S. teenagers.)

Various sound pressure decibel levels (in dBSPL's) are shown here.

Sound	dBs
Jet Aircraft Taking Off	140-150
Rock Concert / Gunshots	135-140
Jackhammer at 15 meters / Subway	85-90
Average City Street / Restaurant	70- 75
Quiet Conversation / Phone Dial Tone	60-80
Office Environment	45
Whisper at 3 meters (10 feet)	30
"Silent" TV Studio	20

The second use of the term decibel, **dBm** (for the milliwatt reference level) is a unit of electrical power.

These decibels are displayed on loudness meters. In audio production we are primarily interested in dBm, which represents levels of electrical power going through various pieces of audio equipment. Two types of **VU meters** for measuring the loudness of sound are in wide use: the digital type and the analog type.

Below are three examples of digital meters. The scale on the left side indicates modulation percentage (percentage of a maximum signal), and the scale on the right is in dB's.

Contrary to what logic might dictate, 0dBm (generally just designated 0dB on a VU meter) is not "zero sound" but, in a sense, the opposite, the maximum desirable sound level. (Granted, that's a bit confusing, but, then again, we didn't make up this system!)

The 0dB point on the meter is just a reference point. Therefore, it's possible to have a sound level on the meter that registers in negative dBs, just as it's possible to have a temperature of -10 degrees Centigrade or Fahrenheit.

LESSON 38**SPOKEN WORDS AND RELEVANT VISUALS**

Under this topic we will further discuss the role and importance of audio in TV production, including **audio mixing, analog and digital audio, audio control devices, Audio Recording, Editing and Playback, Video Switchers and Special Effects, Chroma Key and lip-synching** i.e. synchronizing audio with the video.

Digital Audio

“There is very little about the details of analog audio technology that is useful in the digital world, this means having to learn the basics all over again.” Lon Neumann, Audio Engineer

The decade of the 80s saw the introduction of digital audio signal processing. This not only opened the door to a vast array of new audio techniques, but it represented a quantum leap in audio quality.

For example, the following technical problems have been a headache for audio recording engineers for decades:

- Wow and flutter (tremble or flicker)
- Remnant high frequency response/self-erasure
- Modulation noise
- Bias rocks
- Print-through
- Head alignment problems
- Stereo image shift
- Poor signal-to-noise ratio
- Generational loss

All of these problems and even a few more are eliminated with digital audio. This is possible because of the precise timing pulses associated with digital audio and the fact that digital signal is comprised of "0s" and "1s." These represent simple positive and negative voltages that are not close to each other in value.

As long as equipment can reproduce just these two states, there is an audio signal. However, with an analog signal there are an unlimited number of associated values, providing ample opportunity for things to get out of strike. Technically speaking, the background noise of a digital signal can be as bad as 20dB (which is a lot) and the digital signal will still survive. In the case of an analog signal, this would translate into intolerable noise.

Copying vs. Cloning

Each time you make a copy of an analog audio segment you introduce aberrations or abnormalities because you are only creating a "likeness" of the original. With digital technology you are using the original elements to create a "clone."

If we are using the original uncompressed digital data, we can fully expect to end up with an exact clone of the original, even after 50 generations (50 copies of copies).

With analog data copies of copies quickly result in poor audio quality. Before the event of digital technology, such things as nonlinear editing were not possible.

If you have the option, you'll want to convert analog data into digital as soon as possible and leave it that way until you are forced at some point to convert it back to analog.

Converting Analog to Digital

The same sampling and quantizing principles apply to digital audio. With both audio and video the analog signal is typically quantified or sampled 48,000 times per second.

That means that every 20 microseconds a "snapshot" is taken of the analog voltages. This instantaneous snapshot is then converted first to a base-ten number and from there to a computer-type binary ("0" and "1") form.

The number of data bits used to encode the analog data determines the resolution and dynamic range possible.

A 16-bit encoding system has 65,536 voltage steps that can be encoded. Obviously, the higher the data bits the better the quality — and the more technical resources required to handle the signal.

Such high sampling rates demand a high degree of timing (**synchronization**) precision. Without it things fall apart with stunning speed.

Just as in video, a **synchronizing signal** is used to keep things in lock step. This signal or synchronizing (**sync**) pulse in digital audio is sent out every 0.00002 of a second.

Quantizing Error

In audio production signals must be converted back and forth from analog to digital and from digital to analog. Since we are dealing with "apple and orange" types of data, something called a quantizing error can result.

In the analog-to-digital conversion process, a voltage midpoint is selected in the analog values to use as the digital equivalent. This midpoint is a close, but generally not a perfect, reflection of the original analog signal, thus to avoid the error there is the need to minimize the number of digital-to-analog (as well as analog-to-digital) conversions.

Optimum Digital and Analog Audio Levels

The optimum audio levels for digital audio signals are different than those for analog signals. Whereas the 0dB peak setting is the Standard Operating Level (SOL) for analog systems, for digital equipment the maximum level is typically -20dB. With both analog and digital signals it comes down to something called headroom.

Headroom is the safe area beyond the SOL (standard operating level) point. With a SOL of -20dB, this leaves 20dB for headroom. This is a bit technical, but just keep in mind that the maximum audio level for analog signals will generally be different than it will for digital signals.

With digital signals, however, a digital meter or a peak program meter (PPM), is used. In the case of the digital meter on the right, when the signal touches the red area, we're entered the headroom area. If a digital signal were to go to the very top of the scale, clipping would occur. Unlike analog audio, where exceeding the maximum level will result in signal distortion, in digital audio you might not notice the elimination of audio peaks.

Actually, an occasional full-scale digital sample (to the top of the red range) is considered inevitable; but, a regular string of "top of the scale" occurrences means that the digital audio levels are too high and you are losing audio information.

VU meters respond in different ways to audio peaks. In the case of the standard VU meter the needle tends to swing past peaks because of inertia. At the same time, this needle will not quickly respond to short bursts of audio. Thus, this type of meter tends to average out audio levels.

Because of the limited headroom with digital audio signals a faster responding peak program meter (PPM) or digital meter is preferred. Before you can really get serious about maintaining correct audio levels throughout a production facility, you must see that the audio meters throughout the facility accurately calibrated to a standard audio reference level.

Although, facilities can adopt their own in-house standards, typically, a 1,000Hz audio tone should register 0dB on analog equipment and -20dB on digital equipment.

At the same time, production facilities can set their own internal standards as long as they remain consistent throughout the facility and everyone knows what they are.

Digital Standards

In 1985, the Audio Engineering Society and the European Broadcasting Union developed the first standard for digital audio. This is referred to as the AEB/EBU standard. This standard was amended in 1993. Before this standard was adopted digital audio productions done in one facility could experience technical problems when moved to another production facility.

Digital Audio Time Code

Digital audio systems make use of similar system of identifying exact points in a recording. This is essential in the editing process in order to identify and find audio elements, as well as to keep audio and video synchronized. But as we will see when we talk about video time code, in the process of converting frame rates between the **24**, **30**, and **29.97** (the different video standards), timing errors develop.

Unless the audio technicians are aware of these differences and take measures to compensate, after a few minutes video and audio can get noticeably out of sync. (We've probably all seen movies, news bulletins and shows where the **lip-sync** was out and the words we were hearing didn't exactly match the lip movements of the actors.)

People working with digital audio should at least be aware of the potential problem, and before a video project is started, consult an engineer about the possible problems that could arise in the conversion process. It's much easier to head off these problems before a project starts than to try to fix them later.

Audio Control Devices

Boards, Consoles, and Mixers

Various sources of audio must be carefully controlled and blended during a production. If audio levels are allowed to run at too high a level, distortion will result, and if levels are too low, noise can be introduced when levels are later brought into the normal range. Beyond this, audio sources must be carefully and even artistically blended to create the best possible effect.

The control of audio signals is normally done in a TV studio or production facility with an audio board or audio console.

Audio boards and consoles are designed to do five things:-

1. Amplify incoming signals
2. Allow for switching and volume level adjustments for a variety of audio sources
3. Allow for creatively mixing together and balancing multiple audio sources to achieve an optimum blend
4. Route the combined effect to a transmission or recording device
5. Sophisticated audio boards or consoles also allow you to manipulate specific characteristics of audio. These include the left-to-right "placement" of stereo sources, altering frequency characteristics of sounds, and adding reverberation.

For video field production smaller units called audio mixers provide the most basic controls over audio. The input selector switches at the top of each fader can switch between such things as microphones, CDs, video servers, and satellite feeds. The selector switch at the bottom of each fader typically switches the output of the fader between **cue**, **audition** and **program**.

Cue is primarily used for finding the appropriate starting point in recorded music. A low-quality speaker is intentionally used in many studios so cue audio is not confused with program audio.

Audition allows an audio source to pass through an auxiliary VU meter to high quality speakers so levels can be set and audio quality evaluated. And, of course, **program** sends the audio through the master gain control to be recorded or broadcast.

Even though audio boards, consoles, and mixers can control numerous audio sources, **these sources all break down into two main categories:**

- **Mic-level inputs**
- **Line-level inputs**

Mic-level inputs handle the extremely low voltages associated with microphones, while line-level inputs are associated with the outputs of amplified sources of audio, such as CD players. Once they are inside an audio board, all audio sources become line-level and are handled the same way.

Using Multiple Microphones in the Studio

Most studio productions require several mics. Since the mics, themselves, may have only a 5 to 10 meter (15-30 foot) cord, mic extension cables may be needed to plug the microphone into the nearest mic connector. Studio mics use cables with three-prong connectors.

Since things can get confusing with a half-dozen or more mics in use, the audio operator needs to make a note on which control on the audio board is associated with which mic. A black marker and easily removed masking tape can be used on the audio board channels to identify what mic is plugged into what channel. Mic numbers or talent names can be used for identification.

Because mics represent one of the most problem-plagued aspects of production, they should be carefully checked before the production begins. Unless you do this, you can expect unpleasant surprises when you switch on someone's mic, and there is either no audio at all, or you faintly hear the person off in the distance through another mic.

There is another important reason that mics should be checked before a production: the strength of different people's voices varies greatly. During the mic check procedure you can establish the levels (audio volume) of each person by having them talk naturally, or count to 10, while you use a VU meter to you set or make a note of the appropriate audio level.

Of course, even after you establish an initial mic level for each person, you will need to constantly watch (and adjust) the levels of each mic once the production starts. During spirited discussions, for example, people have a tendency to get louder. It is also good practice to have a spare mic on the set ready for quick use in case one of the regular mics suddenly goes out.

Given the fragility of mics, cables, connectors, etc., this is not an unusual occurrence. As production facilities move to digital audio, boards are taking on a different appearance. Like the new digital switchers and lighting boards, the latest generation of audio boards makes use of an LCD video display.

Using Multiple Mics in the Field

If only one mic is needed in the field, it can simply be plugged into one of the audio inputs of the camera. (The use of the internal camera mic is not recommended except for capturing background sound.) When several microphones are needed and their levels must be individually controlled and mixed, a small portable audio mixer will be needed.

The use of an audio mixer generally requires a separate audio person to watch the VU meter and maintain the proper level on each input. Portable AC (standard alternating current) or battery-powered

audio mixers, are available that will accept several mic- or line-level inputs. The output of the portable mixer is then plugged into a high-level video recorder audio input (as opposed to a low-level mic input).

Most portable mixers have from three to six input channels. Since each pot (fader or volume control) can be switched between at least two inputs, the total number of possible audio sources ends up being more than the number of faders. Of course, the number of sources that can be controlled at the same time is limited to the number of pots on the mixer.

There is a master gain control — generally on the right of the mixer — that controls the levels of all inputs simultaneously. Most mixers also include a fader for headphone volume. Although handheld mics are often used for on-location news, for extended interviews it's better to equip both the interviewer and the person being interviewed with personal mics.

Whereas the mixer will probably require a special audio person to operate, the cameraperson can operate the simple two-mic mixer. The output from the unit is simply plugged into the camcorder.

Audio Mixer Controls

Audio mixers and consoles use two types of controls: **selector switches** and **faders**. As the name suggests, **selector switches** simply allow you to select and direct audio sources into a specific audio channel. **Faders** (volume controls) can be either linear or rotary in design. Faders are also referred to as attenuates, gain controls, or pots (for potentiometers). Linear faders are also referred to as vertical faders and slide faders.

"Riding Gain"

It's important to maintain optimum levels throughout a production. This is commonly referred to as riding gain.

You will recall that, depending on the production facility, digital and analog audio signals typically require different optimum levels — and even those standards vary with different countries. However, to reduce confusion we'll use the analog standard of 0dB to represent a maximum level.

Normal audio sources should reach 0dB on the VU or loudness meter, when the vertical fader or pot is one-third to two-thirds of the way up (open).

Having to turn a fader up fully in order to bring the sound up to 0dB indicates that the original source of audio is coming into the console at too low a level. In this case, the probability of system background noise increases.

Conversely, if the source of audio is too high coming into the board, opening the fader very slightly will cause the audio to immediately hit 0dB. The amount of fader control over the source will then be limited, making smooth fades impossible.

To reflect the various states of attenuation (resistance), the numbers on some faders are the reverse of what you might think. The numbers get higher (reflecting more resistance) as the fader is turned down. Maximum resistance is designated with an infinity symbol, which looks like an "8" turned on its side.

When the fader is turned up all the way, the number on the pot or linear fader may indicate 0, for zero resistance. Even so, just as you would assume, when the pot is turned clockwise or the fader control is pushed up, volume is increased.

Level Control and Mixing

Audio mixing goes beyond just watching a VU meter. The total subjective effect as heard through the speakers or earphones should be used to evaluate the final effect. For example, if an announcer's voice and the background music are both set at 0dB, the music will interfere with the announcer's words.

Using your ear as a guide, you will probably want to let the music peak at around -15dB and the voice peak at 0dB to provide the desired effect: dominant narration with supporting but non-interfering background music. But, since both music and voices have different frequency characteristics (and you'll recall that, unlike VU meters, our ears are not equally sensitive to all frequencies), you will need to use your ear as a guide.

During long pauses in narration you will probably want to increase the level of the music somewhat, and then bring it down just before narration starts again. In selecting music to go behind (under) narration, instrumental music is always preferred. If the music has lyrics sung by a vocalist (definitely not recommended as background to narration) they would have to be much lower so as not to compete with the narrator's words.

Using Audio from PA Systems

In covering musical concerts or stage productions a direct line from a professionally mixed PA (public address) system will result in decidedly better audio than using a mic to pick up sound from a PA speaker. An appropriate line-level output of a public address (PA) amplifier fed to a high-level input of a mixer can be used. However, be careful, feeding a high-level or speaker level PA signal to a mic input can damage the amplifier.

Audio Recording, Editing and Playback

Turntables and Reel-to-Reel Tape Machines

Records and reel-to-reel tape machines used to be the primary source of prerecorded material in TV production.

Today, they have almost all been replaced by CDs (compact discs), DAT (digital audiotape) machines, and computer-type hard drives.

“Vinyl” a term that refers mostly to LP (long playing) records, was the primary medium for commercially recorded music for several decades.

Most vinyl records were either 45 or 33 1/3 rpm (revolutions per minute) and had music recorded on both sides. Records had a number of disadvantages, primarily the tendency to get scratched and worn, which quickly led to surface noise.

Unlike vinyl records, some of the newer media can be electronically cued, synchronized, and instantly started — things that are important in precise audio work.

Reel-to-reel analog 1/4-inch tape machines, which were relied upon for several decades in audio production, have also almost all been replaced — first by cart machines and then by DAT machines and computer hard drives.

Cart Machines

Cart machines (cartridge machines), which are still used at some facilities, incorporate a continuous loop of 1/4-inch (6.4mm) audiotape within a plastic cartridge.

Unlike an audio cassette that you have to rewind, in a cart the tape is in a continuous loop. This means that you don't have to rewind it, you simply wait until the beginning point recycles again. At that point the tape stops and is cued up to the beginning.

Most carts record and playback 30- and 60-second segments (primarily used for commercials and public service announcements) or about three minutes (for musical selections).

Audio carts are now well on their way to the Museum of Broadcasting along with other exhibits of broadcast technology used in earlier years. Today, audio is primarily recorded and played back on hard drives, CDs, and DAT recorders.

Compact Discs

Because of their superior audio quality, ease of control, and small size, CDs (compact discs) are a preferred medium for prerecorded music and sound effects. (Radio stations typically transfer CD selections to a computer disk for repeated use.)

Although the overall diameter of a typical audio CD is only about five inches (12.7 centimeters) across, a CD is able to hold more information than both sides of a 12-inch (30.5cm) LP phonograph record. Plus, the frequency response (the audio's pitch from high to low) and dynamic range (the audio range from loud to soft that can be reproduced) are significantly better.

Although CDs containing permanently recorded audio are most common, CDRs (recordable compact discs) are also used in production. These offer all of the advantages of using CDs, plus the discs can be re-recorded multiple times.

Radio stations that must quickly handle dozens of CDs use Cart/Tray CD players.

For repeated use, CD audio tracks are commonly transferred to computer disks where they can be better organized and quickly selected and played with a few strokes on a keyboard. A computer screen displays the titles and artists, and the time remaining for a selection that's being played.

In mass producing CDs an image of the digital data is "stamped" into the surface of the CD in a process similar to the way LP records (with their analog signals) are produced.

When a CD is played, a laser beam is used to illuminate the microscopic digital pattern encoded on the surface. The reflected light, which is modified by the digital pattern, is read by a photoelectric cell.

The width of the track is 1/60th the size of the groove in an LP record, or 1/50th the size of a human hair. If "unwound" this track would come out to be about 3.5 miles (5.7 km) long. Of course, DVDs take this technology even further.

In 2004, MP3 CDs appeared that have the capacity of as many as 10 standard CDs.

CD Defects and Problems

If the surface of the CD is sufficiently warped because of a manufacturing problem or improper handling or storage, the automatic focusing device in the CD player will not be able to adjust to the variation. The result can be mis-tracking and loss of audio information.

Automatic Error Correction

Manufacturing problems and dust and dirt on the CD surface can cause a loss of digital data. **CD players attempt to compensate for the signal loss in three ways:**

- Error-correction,
- Error concealment (interpolation)
- Muting

Error-correcting circuitry within the CD player can detect momentary losses in data (dropouts) and, based on the existing audio at the moment, supply missing data that's close enough to the original not to be readily noticed.

If the loss of data is more significant, error-correcting circuits can instantly generate data that more or less blends in with the existing audio. If this type of error concealment has to be invoked repeatedly within a short time span, you may hear a series of clicks or a ripping sound.

Finally, if things get really bad and a large block of data is missing or corrupted, the CD player will

simply mute (silence) the audio until good data again appears — a solution that's clearly obvious to listeners.

Audio Recording, Editing and Playback

DAT

DATs (Digital Audio Tapes) are capable of audio quality that exceeds what's possible with CDs. The 2-inch by 2-7/8 inch (5 X 7.6 cm) DAT cassette contains audiotape 3.81mm wide. The cassette is about two-thirds the size of a standard analog audiocassette. The two-hour capacity of a DAT cassette is 66 percent greater than a standard 80-minute CD.

RDAT (recordable digital audiotape) is designed for professional applications, as are the very high quality **ADAT** machines (types I and II).

DAT systems use a head-wheel that spins at 2,000 rpm (revolutions per minute), similar to what's found in a videocassette recorder.

Various types of data can be recorded with the audio. Examples are time code and the MIDI machine control data used in sophisticated postproduction audio work.

DAT Time Code: The DAT time code system, referred to as the IEC Sub-code Format, also insures that tapes recorded on one DAT machine can be played back without problems on any other machine. DAT time code is similar to the SMPTE time code.

Computer Hard Drives

Today, computer hard drives are the choice for broadcast music, commercials, and general audio tracks. Recording audio material on computer hard drives (generally with MPEG-2 or MPEG-4 compression) has several advantages.

First, the material can be indexed in an electronic "table of contents" display that makes it easy to find what you need. This index can also list all of the relevant data about the "cuts" (selections) -- durations, artists, etc. Second, you have almost instant access to the selections.

Once recorded on a hard drive, there is no wear and tear on the recording medium as the audio tracks are repeatedly played. Another advantage is that the selections can't be accidentally misfiled after use. (If you've ever put a CD back in the wrong case, you know the problems this can represent.) And, finally, unlike most CDs, hard drive space can easily be **erased and re-used**.

Data Compression

Both digital audio and video are routinely **compressed** by extracting data from the original signal that will not be missed by most listeners or viewers.

This makes it possible to record the data in much less space, and, thus, faster and more economically. Data can be compressed to various degrees using different compression schemes.

Although hard drives are extremely reliable today, they do occasionally "crash," especially after thousands of hours of use or a major jolt ends up damaging the delicate drive and head mechanism. Unless anti-virus measures are instituted, the computer operating system can also be infected with viruses, which can result in a complete loss of recorded material. With these things in mind, critical files and information should always be "backed up" on other recording media.

IC and PC Card Recorders

Some audio production is now being done with PC card and IC recorders. Both use solid-state memory cards, such as Compact Flash and ATA Cards.

These memory cards contain no moving parts and are impervious to shock and temperature changes. The data in these memory modules can be transferred directly to a computer for editing.

These units typically give you the choice of two basic recording formats: MPEG-2, a compressed data format, and PCM (pulse code modulation) which is an uncompressed digital format. The latter is used with CD players, DAT recorders, and on computer editing programs that use wave (wav) files.

RAM Audio Recorders

The new generation of recorders can be a fraction of the size of other types of recorders. However, unlike recorders with removable media, the stored audio must generally be played back from the unit, itself.

The I-Pod Era

When I-pod-type devices and computers that could "rip" (copy) musical selections from CDs and Internet sources arrived on the scene, consumer audio recording and playback changed in a major way.

Users can assemble hours of their favorite music (up to 2,000 songs) on a computer and transfer it to a pocket-sized, solid-state listening device such as an iPod (on the left) or to one of the new generation cell phones (on the right).

"Podcasts" of broadcasts from TV networks can also be downloaded and listened to or viewed at the user's convenience.

With the iPod nano you can watch up to 5 hours of TV shows, music videos, movies, and Podcasts. Although Apple Computer initially popularized these devices, many manufacturers now produce their own versions.

Audio Editing Systems

Audio editing used to require physically cutting and splicing audiotape — an arduous process. Today, there are numerous computer-based audio editing programs available. Many are shareware that can be downloaded from the Internet.

Shareware can be downloaded and tested, generally for about a month, before the program quits working and you need to pay for it.

Once you pay, you may be given an unlock code that will enable you to use the program for an unlimited time.

Often, minor updates to the program are free; major updates will probably involve an update charge. In addition to basic editing, audio editing programs offer audio filtering, manipulation, and an endless range of special audio effects.

The audio line shows how a single channel of sound appears in an audio editor. The vertical red line indicates the cursor (selector) position.

Much as a cursor is used to mark words in a word processing program to make changes as needed, the cursor in an audio time line provides a point of reference for making audio changes.

Most programs use a computer mouse to drag-and-drop segments and special effects onto a time-line (the longitudinal graphical representation of the audio along a time continuum).

Audio editing in television production is typically handled along with the video on a video editing system.

The hard drives on computer-based audio editing systems can also store a wide range of sound effects that can be pulled down to a time line to accompany narration and music.

Video Switchers and Special Effects

Although video switchers look impossibly complex, once you understand some basics, they don't seem as intimidating. Each button represents a video source even "black," which includes the technical parts of the video signal necessary to produce stable black. The bottom row of buttons (outlined in blue) represents the program bus or direct-take bus.

Any button pressed on this row sends that video source directly to line out, the final feed being broadcast or recorded. The easiest way to instantly cut from one video source to another is simply to select it ("punch it up") on the program bus. The program bus generally handles more than 90% of

video switching. But, what if you want to dissolve (fade) from one camera to another, or fade to black?

For this you need to move to the top two rows of buttons referred to as effects, or the mix/effect bus. From here, with the help of the fader bars, you can create rudimentary special effects. When the fader bars are in the top position, any video source punched up on the top row of buttons is sent to the effects button on the program bus. The buttons that have been selected are shown in red.

In this case, camera 3 was selected on the effects bus, so that's the camera that will be sent down to the program bus. Since the effects bus has been selected on the program bus, its signal will then be sent out and be displayed on to the line out video monitor. Put another way, if the fader bars point toward the top row of buttons on the effects bus, and camera 3 has been selected on that bus, we will see camera 3 when the effects bus is selected on the program bus.

If we were to move the fader bars down to the lower position, the video source selected on the lower row of buttons (in this case camera #2) would be sent to the program bus. During the process of moving the fader bars from the top to the bottom, we see a dissolve (and overlapping transition) from camera #3 to camera #2.

If we stop the fader bars midway between the move from top to bottom, we would see both sources of video at the same time — we would be superimposing one camera over the other. Although this used to be the way we displayed titles, credits, etc., on the screen, today we use an electronic keying process.

In a key one image is electronically "cut out" of the other, while in a super the two images are visible at the same time. Compared to a key, the latter can look a bit jumbled. First, the fader bars have been split—each one being at the "0" (no video, or black) position. If we were to move fader bar "A" to the top position we would put camera 3 on the air; if we were move fader bar "B" to the bottom position we would put camera 2 on the air.

What you don't want to do is split the bars so that they each sends out maximum video from its source. (Video engineers may get very upset with you!) Next, note the extra row of buttons (outlined in green) marked "preview," just below the program bus.

With the preview bus we can set up and check an effect on a special preview monitor prior to switching it up on the program bus. Without being able to preview and adjust video sources before putting them on the air, we might end up with some unpleasant surprises. To see (preview) an effect, we first punch up effects on the preview bus. When we get the effect we want on the effects bus, we can cut directly to it by punching up effects on the program bus.

Some switchers have multiple effects banks.

If you moved the fader bars on Effects #2 to the up position, you would make a transition from black to whatever was on Effects #1. In this case it would be Camera 2 superimposed over Camera 3. Finally, let's add a few bells and whistles.

The top row of buttons in this drawing represents various types of wipes.

Yellow on the buttons represents one video source, black another source.

Additional patterns—some switchers have hundreds—can be selected by entering numbers on the keypad.

If wipe is selected on the switcher, the button pushed (indicated in red in this drawing) shows the moving pattern (controlled by the fader bars) that would be involved in the transition from one video source to the other.

A border along the edges of the wipe pattern — a transition border — can be used and its hue, brightness, sharpness, width, and color saturation selected.

The key clip knob controls the video level of the source you are going to key into background video. This is adjusted visually on the preview monitor.

Downstream keyers, which are often used to key in such things as opening titles and closing credits, are external (downstream from) the basic switcher.

The advantage of a downstream keyer is that it doesn't require the use a switcher's effects bank for keying.

This means that the bank stays free to be used for other things.

The switcher incorporates versions of all of the features, plus a computer display that adds even more options.

Although switcher configurations differ, they all center on the same basic concepts.

Chroma Key

The type of key is referred to as luminance key because the keying effect is based on the brightness or luminance of the video that you are keying in. But, as we saw when we discussed virtual reality sets, it's also possible to base keying on color (chroma). In chroma key a particular color is selected for removal and another video source is substituted in its place.

This type of keying is commonly done during weathercasts where a graphic is inserted behind weather person. Although any color can be used in chroma key, **royal blue** and a **saturated green** are the most commonly used? Most of the special effects we seen on television today are done with chroma key.

Software-Based Switchers and Effects

Most software-based switchers use the hardware-based switcher.

Note the familiar fader bars and the various banks of buttons. In this case, instead of pushing buttons, you click on the buttons with a mouse.

Software based systems can be easily and regularly upgraded when new software is written—an advantage you don't have to the same degree with hardware-based equipment.

With most software-based systems it's also possible to go far beyond basic switching and create such things as 3-D illustrations and animated effects.

LESSON 39**TALK SHOWS, FORUMS AND DISCUSSION PROGRAMMES**

There are many programmes being presented on television now a day which require the ability to speak spontaneously. Such programmes as the round table, forum, talk shows, discussions, interviews, man-on-the-street, early morning variety programmes, breakfast shows, with recording on-the-spot telecast, and some of the news commentary programmes, require the telecaster and newsmen to be a fluent and spontaneous speakers.

The art of announcing has become so standardized that at present one small bit of impromptu, extempore or unrehearsed television programme can be detected and frequently is a welcome relief if well done and properly executed.

For these types of programmes a good vocabulary of descriptive words, particularly action verbs, adverbs and nouns is essential. The impromptu speaker must have a good cultural background. For he or she is not forgiven for mistakes in grammar, pronunciation accent or diction.

The speaker in any instance is required to have excellent power of observation, to be able to see ahead while he is talking about something that he or she has previously observed. In too many instance the TV journalist is inclined to “hem or haw” while he or she is groping and searching for a word that he or she feels will convey the correct impression to the listeners.

In such unprepared programmes there must be no dead air or silence, although brief pauses undoubtedly will make the material sound more conversational. These pauses will be shorter than they would be if the anchor or the host were conversing with a visible audience. Quickness in thought and expression are equally vital.

Probably one of the best practices to use in the production for this type of television programmes, is talking to oneself, particularly describing the things that are being seen.

Another requirement of such extempore programmes is an ability to time the material to be presented. The programme will run for a definite period, and the TV journalist must time oneself so that he or she will have rounded out ones material, summarized if necessary, and come to a satisfactory conclusion at the second that one goes off the air.

One of the faults evident in the impromptu speech of the novice or a new comer is the repetition of certain phrases and words that pierce the ears of listeners and bother the viewers. Some speaker, master of the ceremonies, street interviewers are inclined to start their sentence with an interjection or connective, in most instances “ah” because they have not definitely formulated the ideas about what they intend to say.

It is much wiser to be silent for an instant while the sentences, expression or thought is developed. Possibly good experience in smooth delivery can be obtained by practice. If the programme is commercial one, the anchor or announcer is constantly aware of the fact that he or she must lead into the commercial break from that running talk show appropriately and nicely.

The talk shows, discussion programmes and forums are never rehearsed in advance of he telecast. The interviewee is asked to suggest certain questions that he would be willing to answer and discuss, but it makes for greater interest and spontaneity if the questioner does not know the inquiries in the advance. The interrogator however, must use good judgment and diplomacy in the selection of questions.

It is good practice to sit down with the person to be interviewed at the programme set with in advance of the show, in order to get him into the conversational mood and to ascertain his attitude. This puts the guest talker at ease and eliminates the probability of “camera shyness” or “mic. fright”.

Basic techniques to be followed in talk shows:-

- Interviewer will introduce the guest and ask question which will also tend to introduce him.
- It is not bad plan to ask some rather light, frivolous questions that may start the programme with a spurt of humour, for this put the interviewee at ease and please the viewers.
- It is essential that there be no pauses of any length, consequently the person who is doing the interviewing must be alert to discover the leads in the answers he receives.
- First few minutes will be devoted to less serious discussion in order to brighten the subject and to encourage the interviewee to articulate comfortably.
- There is a tendency to allow the interview to become argumentative but this should not be avoided because it makes the interviewer express his ideas, which are not of importance.
- The interviewer must remember that he is not interviewing himself. His job is to ask stimulating questions, not to supply the answers; to bring out the interviewee's personality not of his own.
- Do not try to influence the guest by leading questions. The person who is important enough to be interviewed must have something interesting enough to appeal the viewers.
- Try to dig down and disclose the person off guard; by that it is meant that there should be revelation not the exposure.
- The host should have the general knowledge so that he can ask good and intelligent questions about the relevant field of the guest and his interest.
- Most of the questions should be of such nature as to require more than "yes" or "no" answers, however interviewee must not be forced to give too lengthy replies.
- It is permissible for the anchor to raise his hand and interrupt the speaker if he gets started on an oration or a long speech.
- If some definite topic is to be discussed, the questioner must strive to keep the speaker talking about the topic and lead him back to subject if necessary.
- The talk must be natural and conversational. Mild laughter may be heard but it is not advisable for the announcer to laugh too heartily at his own comments.
- Repetition in style of questions should be avoided such as starting questions with the word "well" or "I see" or "okay" and "fine" after each answer.

LESSON 40**FUNCTIONS OF VARIOUS DEPARTMENTS OF A TV SET UP**

There are many different staffing arrangements in Television stations. Some big city stations employ 300-400 people and may be divided into dozens different departments. Small town stations may have 20-30 employees and only a few departments.

Normally **General Manager** is the head of a television station, the person ultimately responsible for all station activities. The **Sales department** is responsible for selling time to local and national advertisers, scheduling advertisements, sending bills to customers.

Maintaining all the equipment is the responsibility of **Engineering Department**. The **Production Department** puts together locally produced programming. At many stations the **programming function** is also handled by the production department. Those involved in programming decide what programmes should be telecast and at what time they should be presented.

The **News Department** includes the news director, anchorpersons, reporters and writers responsible for the station's newscast. The **Administrative Department** supports the General Manager in running the station.

At the network level, the divisions are somewhat more complicated. Although the major networks differ in their setups, all seem to have departments that perform the following functions:-

- **Sales:** handles sales of network commercials and works with advertising agencies.
- **Entertainment:** works with the producers to develop new programs for the networks.
- **Owned and operated stations:** administers those station owned by the networks.
- **Affiliated Relations:** A very important job in the new century, it supervises all contracts with stations affiliated with the network and generally tries to keep the affiliates happy.
- **News:** responsible for all network news and public affairs programmes.
- **Sports:** responsible for all sports programming.
- **Standards:** checks all network programmes to make sure they do not violate the law or the networks own guidelines for appropriate content.
- **Operations:** handles the technical aspects of actually sending programmes to affiliates.

Infrastructure or organizational set up and Working of a TV channel

For a television organization to manage the affairs there is a Board of Management or Board of Governors or Board of Directors. The Chief Executive or Chairman or Managing Director approved by the Board, is the Administrative and Executive Head of the Corporation.

Human Resources or Administration & Personnel Department

This department is responsible for formulation and implementation of administrative policies. Admin & Personnel Department consists of two sections "Administration section" and "Personnel Section". The over all head is Director whereas at centers Executive Administration & Personnel Manager heads it.

Programmes Department

Programmes Department is responsible for making programmes like dramas, music, infotainment and religious programmes and miscellaneous programmes. The Director Programmes heads this Department whereas Executive Programmes Manager is the person in charge.

News Department

This department is responsible for news gathering, production and Telecast through news bulletins. This department is headed by Director News and Senior News Editor is the in charge.

Current Affairs Department

Current Affairs related programmes are a regular feature of transmission of a news channel. A Director Current Affairs heads it and at small stations Head of Current Affairs is team leader. This department is responsible for making current affairs programmes and bulk of programming at a channel is contributed by it.

Sports Department

Sports Department is to provide sports entertainment to viewers and is headed by Director Sports and there are Sports Producers at different centers as well. Apart from occasional International / National sports coverage TV channels also televise live national and international sports around the world.

International Relations Department

The major responsibility of this Department is to promote friendly relations with international TV Networks/Organizations to enhance knowledge in the field of electronic media. It also participates in the International Television Festivals/Competitions held in different countries by sending best programmes.

Engineering Department

The Engineering Department takes care of the day to day operations and maintenance of a TV network and Rebroadcast Stations, new projects, Planning & Procurement, as well as research and Development activities. At national level Director Engineering is the while at centers Executive Engineering Manager may be the in charge.

Training Courses

Such courses impart professional training in various disciplines of television broadcast technology. It may be headed by a full time Director, and is assisted by a team of television professionals who are members of the academic faculty.

Marketing

The Marketing Department of TV network is responsible for marketing the programmes and the commercial time on its screen. It is the major source of any TV network earnings. It is headed by Director Marketing at large stations and by General Managers at the small stations. Advertisers can book commercial spots in the commercial breaks provided between programmes and can also sponsor programmes shown on a TV network.

Information Technology

The Information Technology Department is responsible to deal the IT up-gradation and solutions to bring improvement on screen and ensure non-stop programming. It is headed by Controller at large stations and IT in charges small stations.

Finance Department

Finance Department is headed by Director Finance large stations and by Executive Manager Finance at small stations. It has to record all business transactions according to the prevailing tax laws and accounting principles.

Sub-Departments

Programmes Department

This Department deals with the production of programmes.

Camera Department

This is a sub department of programmes production Department. It is headed by chief cameraman & is supported by cameramen, light men, still photographer.

Design Department

This department is responsible for set designing and erection of sets in the studios and outdoors of various a TV network programmes. It is headed by the Design Manager and consists of designers & other support staff and studio hands.

Make-up

This is a sub section of programmes department & deals with the make-over & get ups of the talents according to nature of the programme.

Presentation Section

This section comes under programmes department & handles the Scheduling & broadcast of programmes/ advertisements.

LESSON 41

PROGRAMMES DEPARTMENT

A **television program** (US), **television programme** (UK) or simply **television show** is a segment of programming in television broadcasting. It may be a one-off broadcast or, more usually, part of a periodically returning **television series**. A television series that is intended to be broadcast a finite number of episodes is usually called a mini-series or serial (although the latter term also has other meanings).

Americans call a short run lasting less than a year a **season**; People of the United Kingdom generally call this a **series**. This season or series usually consists of 6–26 instalments. U.S. industry practice tends to favour longer seasons than those of some other countries.

A single instance of a program is called an **episode**, although this is sometimes also called a "**show**" or "**programme**." A one-off broadcast may be called a "**special**". A television movie ("made-for-TV" movie) is a film that is initially broadcast on television rather than being released in theatres or direct-to-video, although many successful television movies are later released on video.

Today, advertisements play a role in most television programming, such that each hour of programming can contain up to 15 minutes of advertisements in some countries. By contrast, being publicly funded, the BBC in the United Kingdom does not run advertisements, except to trail (promote) its own output.

Its promotions appear between and near the end of shows but not in the middle of them, much like the Public Broadcasting Service (PBS) in the United States and the Australian Broadcasting Corporation (ABC) in Australia. With rise of internet video clips, there is serious debate about where the future of television programs is going.

Program content

The content of television programs may be factual, as in **documentaries**, **news**, and **reality shows**, or fictional as in **comedy** and **drama**. It may be topical as in the case of news and some made-for-television movies or historical as in the case of such documentaries or fictional series.

It may be primarily instructional as in the case of **educational** programming, or **entertaining** as is the case in situation comedy, reality TV, or game shows, or for income as advertisements. A **drama** program usually features a set of actors in a somewhat familiar setting. The program follows their lives and their adventures.

Many shows, maintain a status quo where the main characters and the premise changed little. If some change happens to the characters lives during the episode, it is usually undone by the end. (Because of this, the episodes can usually be watched in any order.) There are many series that feature progressive change to the plot, the characters, or both.

Common TV program periods include regular broadcasts (like TV news), TV series (usually seasonal and ongoing with a duration of only a few episodes to many seasons), or TV miniseries which is an extended film, usually with a small pre-determined number of episodes and a set plot and timeline.

Miniseries usually range from about 3 to 10 hours in length, though critics often complain when programs hit the short end of that range and are still marketed as "minis." In the UK, the term "miniseries" is only usually used in references to imported programmes, and such short-run series are usually called "serials".

Older American television shows began with a Pilot title sequence, showed opening credits at the bottom of the screen during the beginning of the show, and included closing credits at the end of the

show. However, beginning in the 1990s some shows began with a "cold open," followed by a title sequence and a commercial break.

Many serialistic shows begin with a "Previously on..." introduction before the teaser. And, to save time, some shows omit the title sequence altogether, folding the names normally featured there into the opening credits. The title sequence has not been completely eliminated; however, as many major television series still use them.

While television series appearing on TV networks are usually commissioned by the networks themselves, their producers earn greater revenue when the program is sold into syndication. With the rise of the DVD home video format, box sets containing entire seasons or the complete run of a program have become a significant revenue source as well.

Many of the prime-time comedy shows and cartoons are digitally re-mastered for television, as there is more original and re-issued DVD sets of television programs containing either entire seasons or complete series runs to come in the future.

Television series by genre

Scripted entertainment

Dramatic television series (including drama series, serial drama, science-fiction, or soap operas)
Or Television comedy (typically situation comedy or sketch comedy)

- Animated television series
- Miniseries and TV Movies
- Award show

Unscripted entertainment

- Talk shows
- Reality television
- Game shows

Informational

- News programs
- Documentary
- Television news magazine, dealing with current affairs
- TV infomercials, which are advertising paid spots

Development

What follows is the **standard procedure** for shows on network television.

A person decides to create a new television series. The show's creator develops the show's elements, consisting of the concept, the characters, the crew, and various actors (in some cases, "big-name" actors). They will then offer ("pitch") it to the various television networks in an attempt to find one that is interested in the series and order a prototype first episode of the series, known as a **pilot**.

To create the pilot, the structure and team of the whole series needs to be put together. If the network likes the pilot, they will "pick up" the show for their next season or series. Sometimes they'll save it for "midseason" or request re-writes and further review. And other times they'll pass entirely, leaving the show's creator forced to "shop it around" to other networks. Many shows never make it past the pilot stage.

If the show is picked up, a "run" of episodes is ordered. Usually only **13 episodes** are ordered at first, although a series will typically last for at least 26 episodes. The show hires a group or panel of writers, who usually work in parallel: the first writer works on the first episode, the second on the second episode, and so forth.

When all of the writers have been used, the assignment of episodes continues starting with the first writer again. On other shows, however, the writers work as a team. Sometimes they will develop story ideas individually, and pitch them to the show's creator, who then folds them together into a script and rewrites them.

In contrast to the US model, the UK procedure is operated on a sometimes similar, but much smaller scale.

The method of "team writing" is employed on some longer dramatic series (usually running up to a maximum of around thirteen episodes). The idea for such a show may be generated "in-house" by one of the networks; it could originate from an independent production company; it will sometimes be a product of both.

However, there are still a significant number of programs (usually sitcoms) that are built around just one or two writers and a small, close-knit production team. These are "pitched" in the traditional way, but since the creator(s) will handle all the writing requirements, there will be a run of six or seven instalments per series once approval has been given.

Production

The **Executive Producer**, often the show's creator, is in charge of running the show. They pick crew and cast (subject to approval by the network), approve and often write series plots, and sometimes write and direct major episodes. A whole host of other producers of various names work under him or her, to make sure the show is always running smoothly.

As with films or other media production, production of an individual episode can be divided into three parts: pre-production, principal photography, and post-production. Pre-production begins when a script is approved for production. A **Director** is chosen to plan what the episode will actually look like in the end.

Pre-production tasks include storyboarding, construction of sets, props, and costumes, casting guest stars, budgeting, acquiring resources like lighting, special effects, stunts, etc. Complex scenes are translated from storyboard to animatics to further clarify the action. Scripts are adjusted to meet altering requirements.

Once the show is planned, it must then be scheduled; scenes are often filmed out of sequence, guest actors or even regulars may only be available at certain times, sometimes the principal photography of different episodes must be done at the same time, complicating the schedule (i.e. a guest star might shoot scenes from two episodes on the same afternoon).

Some shows have a small stable of directors, but also usually rely on outside directors. Given the time constraints of broadcasting, a single show might have two or three episodes in pre-production, one or two episodes in principal photography, and a few more in various stages of post-production. The task of directing is complex enough that a single director can usually not work on more than one show at a time, hence the need for multiple directors.

Principal photography is the actual filming of the episode. Director, actors and crew will gather at soundstages or on location to film a scene. A scene is further divided into shots, which should be planned during preproduction; depending on scheduling, a scene may be shot not in the chronological order of the story.

Conversations may be filmed twice from different angles, often using stand-ins, so one actor might perform all their lines in one set of shots, and then the other side of the conversation will be filmed from the opposite perspective. In order to complete a production on time, a second unit may be filming a different scene on another set or location at the same time, using a different set of actors, an assistant director, and a second unit crew.

A **Director of Photography** takes care of making the show look good, doing things with lighting and so on. Once principal photography is complete, producers coordinate post-production tasks. Visual and digital effects are added to the film; this is often outsourced to companies specializing in these areas.

Often music is performed with the conductor using the film as a time reference (other musical elements may be previously recorded). An **Editor** cuts the various pieces of film together, adds the musical score and effects, determines scene transitions, and assembles the completed show.

Distribution

The show is then turned over to the network, which sends it out to its affiliates, which broadcast it in the specified timeslot. If the Nielsen Ratings are good, the show is kept alive as long as possible. If not, the show is usually cancelled. If the show is popular or lucrative, and a number of episodes (usually 100 episodes or more) are made, it goes into syndication where broadcast rights are then resold.

The show's creators are then left to shop around remaining episodes, and the possibility of future episodes, to other networks. On especially successful series, the producers sometimes call a halt to a series on their own and end it with a concluding episode which sometimes is a big production called a series finale.

Seasons/Series

The terminology used to define a set of episodes produced by a television series varies from country to country. In North America and Australia, the term used to describe a regular run of episodes is a television season or simply, season. For example, a season of a television series might consist of 22-24 episodes broadcast regularly between September and April with a hiatus or break during the holidays.

Alternatively, it may comprise 22-24 consecutive episodes between September and December or January and May. The latter is often referred to as a "non-stop season", which is usually used for serial television series. Another example might be a series that airs only a 6-13 episode season during the summer.

In the United Kingdom, on the ABC in Australia and in other countries, these sets of episodes are now referred to as series (the term is used separately from "television series" which refers to a complete production), although in the UK historically "season" was used on certain series, and remains in use in reference to them.

In the United States, most regular television series have 22 episodes per season. In general, dramas usually last 44 minutes (an hour with advertisements), while comedies last 22 (30 with advertisements). However, with the rise of cable networks, especially pay ones, series and episode lengths have been changing.

Cable networks usually feature seasons lasting around thirteen episodes. Many British series have significantly shorter yearly runs, which feature 6 episodes per series. Recently, American non-cable networks have also begun to experiment with shorter seasons for some programs, particularly reality shows.

This is a reduction from the 1950s, in which many American shows (e.g., *The Twilight Zone*) had 29 to 39 episodes per season. Actual storytelling time within a commercial television hour has also gradually

reduced over the years, from 50 minutes out of every 60 minutes in the early days down to the current 44 minutes (and, on some networks, less).

The Japanese have sometimes subdivided television series and dramas into *kūru* (*kūru*?), from the French term "cours" for "course", which is a 3-month period usually of 13 episodes. Each *kūru* generally has its own opening and ending image sequence and song, recordings of which are often sold.

Lists by genre or characteristic

- Animated series
- Awards shows
- Celebrity Shows
- Children's television shows
- Comedies
- Comedies without laugh tracks
- Cooking shows
- Comedy-drama television series
- Fantasy programs
- Game shows
- News programs
- Reality programs
- Satirical news programs
- Science fiction sitcoms
- Sketch comedy shows
- Soap operas
- Talk shows
- Musical shows

LESSON 42

**NEWS AND CURRENT AFFAIRS
THE PROGRAMMING & SCHEDULING****Getting TV programme on the air**

At the local level, the biggest effort at a TV station goes into the newscast. Almost every station has a studio that contains a set for one or two **anchor-people**, a **weather forecaster** and a **sports-caster**. The stations **news director** assigns stories to **reporters** and **camera crews**, who travel to the scene of a story to videotape a report.

Back at the station, the newscast producer and the **news director** are planning what stories to air and allotting time to each. In the meantime, the **camera crews** and **reporters** return; the reporters write copy and **editors** prepare videotapes segments. When the final script is finished (this may be only a few minutes before airtime), it is given to director, who is responsible for pulling everything together and putting the newscast on the air.

In addition to the news, the local station might also produce one or two interview programmes. Some stations produce a magazine programme consisting of segments videotaped on location by portable equipment and later edited into final form. Aside from these kind of shows, most local stations do little other productions.

Because they are responsible for filling the hours when the biggest audience is watching (called prime time, 8-11 pm generally), the network must pay special attention to cultivate news shows. For the moment, let's concentrate on how a prime time series is produced.

Everything starts with an idea. Network executives receive hundreds of ideas every year; some come from independent producers, some from TV departments of motion pictures companies, some from network employees and a good many from the amateurs hoping for a break through. From this mass of ideas the networks select perhaps 50-75, usually submitted by the established producers or companies for further attention.

After examining plot outlines and the background sketches of the leading characters for these ideas that survive, the networks request a sample script and a list of possible stories that could be turned into scripts. If the idea still looks promising, the networks and producers enter into a contract for a pilot programme, the first episode of a series.

In a typical year, perhaps 25 pilots are ordered by the each network. If the pilot show gains a respectable audience, the network may order next sex episodes to be produced and my place programme on its fall schedule. From the hundreds of the ideas that are sent to the network, only a few ever make it to prime time.

The process does not stop with a fall season. If a programme does well in the ratings, the network will order enough episodes for the rest of the season. If the show does not do well, it will be cancelled and another show will replace it. Meanwhile, network executives are sifting and sorting through the hundreds of programmes for the next season and the cycle begins once again.

TV broadcast programming

Broadcast programming, or scheduling, is the practice of organizing television programs in a daily, weekly, or season-long schedule. Modern TV broadcasters regularly change the scheduling of their programs to build an audience for a new show, retain that audience, or compete with other broadcasters' programs.

Television scheduling strategies are employed to give programs the best possible chance of attracting and retaining an audience. They are used to deliver programs to audiences when they are most likely to

want to watch them and deliver audiences to advertisers in the composition that makes their advertising most likely to be effective.

At a micro level, scheduling is the minute planning of the transmission; what to broadcast and when, ensuring that every second of airtime is covered.

Scheduling strategies

- Day-parting
- Theme-ing
- Stripping
- Stacking
- Counter-programming
- Bridging
- Tent-poling
- Hammock-ing
- Cross-programming

Day-parting

In TV broadcasting, day-parting is the practice of dividing the day into several parts, during each of which a different type of television programming appropriate for that time is aired. Programs are most often geared toward a particular demographic, and what the target audience typically engages in at that time.

Theme-ing

It is, having a special theme-night on some particular occasion.

Stripping

Stripping is running a syndicated television series every day of the week. It is commonly restricted to describing the airing of shows which were weekly in their first run.

Stacking

Stacking is a technique used to develop audience flow by grouping together programs with similar appeals to "sweep" the viewer along from one program to the next.

Counter-programming

Counter-programming is used when a time period is filled with a program whose appeal is different from the opponent program because it is a different genre or appeals to a different demographic.

Bridging

Bridging is being used when a station tries to prevent the audience from changing channels during a junction point - the main evening breaks where all channels stop programs and shift gear. This is achieved in a number of ways including: having a program already underway and something compelling happening at a junction point, running a program late so that people 'hang around' and miss the start of other programs, or advertising the next program during the credits of the previous.

Tent-poling

In tent pole programming, the programmers bank on a well-known series having so much audience appeal that they can place two unknown series on either side, and it is the strength of the central program that will bring the others along to victory.

Hammock-ing

A technique used by TV broadcasters whereby an unpopular program is scheduled between two popular ones in the hope that viewers will watch it. Public-service broadcasters use this as a way of promoting serious but valuable content.

Cross-programming

Cross-programming involves the interconnection of two shows. This is achieved by dragging a storyline over two episodes of two different programs.

Programming

Getting TV programming shown to the public can happen in many different ways. After production the next step is to market and deliver the product to whatever markets are open to using it.

This typically happens on two levels:

Original Run or First Run – a producer creates a program of one or multiple episodes and shows it on a station or network which has either paid for the production itself or to which a license has been granted by the producers to do the same.

Syndication – this is the terminology rather broadly used to describe secondary programming usages (beyond original run). It includes secondary runs in the country of first issue, but also international usage which may or may not be managed by the originating producer.

In many cases other companies, TV stations or individuals are engaged to do the syndication work, in other words to sell the product into the markets they are allowed to sell into by contract from the copyright holders, in most cases the producers. First run programming is increasing on subscription services, but few domestically produced programs are syndicated on domestic FTA elsewhere.

This practice is increasing however, generally on digital-only FTA channels, or with subscriber-only first run material appearing on FTA. Unlike the repeat FTA screenings of a FTA network program almost only occur on that network. Also, Affiliates rarely buy or produce non-network programming that is not centred on local events.

Funding

Around the globe, broadcast television is financed by either advertising, a TV licensing (a form of tax) or by subscription. To protect revenues, subscription TV channels are usually encrypted or encoded to ensure that only subscription payers receive the decryption codes or decoding to see the signal. Non-encrypted channels are known as **Free to Air** or FTA.

Television genres

Television genres include a broad range of programming types that entertain, inform, and educate viewers. The most expensive entertainment genres to produce are usually drama and dramatic miniseries. However, other genres, such as historical genres, may also have high production costs.

Popular entertainment genres include **action-oriented shows** such as **crime, detective dramas, horror or thriller shows**. As well, there are also other variants of the drama genre, such as **daytime soap operas**. **Sci-fi** (Science fiction) shows can fall into either the drama category or the action category, depending on whether they emphasize philosophical questions or high adventure. **Comedy** is a popular genre which includes **sitcoms** (Situation Comedy) and **animated** shows.

The least expensive forms of entertainment programming are **game shows, talk shows, variety shows, and reality TV**. Game shows show contestants answering questions and solving puzzles to win prizes. **Talk shows** feature interviews with film, television and music celebrities and public figures.

Variety shows feature a range of musical performers and other entertainers such as comedians and magicians introduced by a host or Master of Ceremonies. There is some crossover between some talk shows and variety shows, because leading talk shows often feature performances by bands, singers, comedians, and other performers in between the interview segments.

Reality TV shows show "regular" people (i.e., not actors) who are facing unusual challenges or experiences, ranging from arrest by police officers to weight loss. A variant version of reality shows depicts celebrities doing mundane activities such as going about their everyday life or doing manual labour jobs.

One of the television genres, the children's and youth genre is defined by the audience, rather than by the content of the programming. Children's programming includes animated programs aimed at the child demographic, documentaries for children, and music/variety shows targeted at kids. There is overlap between the children's/youth genre and other genres, such as the educational genre.

Social aspects of television

Television has played a pivotal role in the socialization of the 20th and 21st centuries.

There are many social aspects of television that can be addressed, including:

- Positive effects
- Negative effects
- Gender and television
- Politics and television
- Socializing children
- Technology trends
- Suitability for audience
- Alleged dangers
- Propaganda delivery
- Educational advantages

LESSON 43**COORDINATION AMONG DIFFERENT DEPARTMENTS
OF
TELEVISION**

The coordination among different departments of television is not possible without proper communication and timely correspondence so during the programme planning by a producer, he or she must be vigilant about the type of programmes, nature of assignments and the working procedure of concerned departments.

The work of an established and well-organized television network is carried on according to standing operative procedures laid down by the organization. There are different forms, certain pro-forma and other related documents, with which producer in a network has to deal efficiently and timely.

Such documents include VTR work schedule, Studio work schedule, Actual Information Report, Properties and wardrobe Requirement list, Programme Budget Estimate, Programme Budget Proposal, VTR Log book, Contract Form, Standards/Censor/Quality Previewing Pro-forma, Gate Pass, Transport Requisition, Duty roster of Camera Department, Duty roster of Camera Department, Schedule of ENG Store, Daily working schedule, Daily Cue sheet, Advertisement sheet and Fix point chart.

Now, let us discuss these one by one in detail that which of the form and document is used for what purpose.

ENG work schedule

Electronic News Gathering is the term for outdoor recordings and for any kind of programme either of entertainment or current affairs the same schedule is used.

The contents on this document are as follows:

- Programme title
- Sub-title
- Date of telecast
- Episode No
- ENG Unit
- Date of recording
- Time (From--to--)
- Producer
- Remarks

The technical equipment required for a recording is mentioned as remarks.

1. Neck mic.
2. Hand mic.
3. Cordless Neck Mic.
4. Cordless Hand Mic.
5. Boom / fish-pool Mic.
6. Baby light
7. Kit light
8. Sun gun
9. Ultra light
10. Reflector
11. Battery Charger
12. Monitor

EFP work schedule

Electronic Field Production is the term for recording a mega show and multi camera outdoor recordings. The contents on this document are as follows:

- Name of the event
 - Occasion
 - Location
 - OB installation
 - DSNG installation
 - ENG unit (if required)
 - Number of cameras
 - Set arrangements
 - Lighting
 - VTR
 - Public address (PA) system
 - Production In charge
 - Executive Producer
 - Administrative arrangements
1. **Transport**
 2. **Security**
 3. **Food and beverages**

VTR work schedule

Video Tape Recording is the term used for is a consolidated activity of editing, music mixing, sound effects, graphics and animations a programme.

The contents on this document are as follows:

- Programme title
 - Sub-title
 - Date of telecast
 - Episode No
 - ENG Unit
 - Date of recording
 - Time (From--to--)
 - Producer
 - Requirements
 - **Type of Tapes**
1. U-matic
 2. Beta
 3. DVC Pro
 4. DV Cam
 5. Mini DV
- Computer
 - Mic.
 - Audio tape recorder

Studio work schedule

Studio work schedule is used for the recording a programme in a studio.

The contents on this document are as follows:

- Studio
 - Time
 - Programme title
 - Episode No
 - Duration
 - Timings of Work
1. Make up
 2. Set erection
 3. Lighting
 4. Dry rehearsal
 5. Camera Rehearsal
 6. VTR / Audio / Live
 7. Switch on of cameras
 8. As and when asked by the producer
- Facilities required
 - Number of Cameras
 - Number of Monitors
 - Number of Microphones
 - Number of Audio tape recorders
 - Number of VCRs/VTRs (Video Audio tape recorders)
 - Number of Video tapes
 - Plasma Screen (if required)
 - Any special requirement
 - Date of telecast
 - Date of submission
 - Date of issue

Actual Information Report

This reports tells the actual activity taken place during the process of recording of a TV programme either it is outdoor recording or indoor recording.

The contents on this document are as follows:

- Programme title
 - Episode No
 - Date of Recording
 - Head run
 - Total recording
 - Timings
1. Lighting
 2. Dry rehearsal
 3. Camera Rehearsal
 4. VTR / Audio / Live
 5. Switch on of cameras
- Scenes
 - Takes
 - Signature of Producer
 - Signature of Studio Supervisor

Props. and wardrobe Requirement list

All the required properties on the set of a television programme and the dressing, costumes or get-ups for the performers are intimated to designs department by the producer.

The contents on this document are as follows:

- Name of the producer
 - Programme title
 - Episode No
 - Date of VTR
 - Studio
 - Articles
1. Specification
 2. Quality
 3. Quantity
- Required on
 1. Date
 2. Time
 - Store position
 1. Hire
 2. Purchase
 - Signature of Designer
 - Signature of Producer
 - Prop Assistant
 - Wardrobe Assistant
 - Design Manager

Programme Budget Estimate

This is the estimate of expenditures in most of the cases for a quarter of 13-week or for any single programme.

The contents on this document are as follows:

- Name of the producer
- Programme title
- Duration
- Quarter
- Talent fee
- Research fee
- Script fee
- Lyrics for song
- Composition fee
- Performance fee
- Make up
- Tapes
- Still photos
- Travelling expenditures
- Boarding and lodging
- Unforeseen expanses

Programme Budget Proposal

This is the statement proposed payments as a guideline to account department furnished by the producer prior to recording of each programme.

The contents on this document are as follows:

- Name of the producer
- Programme title
- Episode No
- Date of telecast
- Date of VTR
- Studio
- PBE reference
- Proposed talent
- Role
- Duration
- Class
- Rate
- Fee
- Rehearsal Allowance
- Conveyance Allowance
- Total Amount
- Accounts Department
- Programmes Secretary
- Signatures Producer
- Signatures Programmes Manager
- Signatures General Manager

VTR Log book

This is the statement on which actual payments are to be made by account department furnished by the producer after the recording of each programme.

The contents on this document are as follows:

- Programme title
- Episode No
- Date of VTR
- Studio
- Producer
- Name of talent
- Nature of performance
- Duration
- Tape No.
- Signature of Producer
- Signature of Engineering Manager

Contract Form

This is basically an offer to a talent for participation by a TV organization and a token of acceptance by the talent. Talent should read and understand the contents, terms and conditions of contract before signing the contract.

The contents on this document are as follows:

- Name of talent
- Contract No

- Date
- Programme title
- Programme type
- Episode No
- Duration
- Date of recording
- Date of telecast
- Nature of participation
- 1. Writer
- 2. Researcher
- 3. Compere/Host
- 4. Composer
- 5. Poet
- 6. Vocalist
- Fee for purchase of rights
- Daily Allowance
- Rehearsal Allowance
- Conveyance Allowance
- Others
- Total Amount
- Talent's Full Name
- Guardian
- Address
- Talent's Signature
- Finance Department
- Category of Artiste
- Script fee
- Talent fee
- Music composition
- Rehearsal
- Conveyance
- Income tax deduction
- Date of receipt
- Voucher No.
- Cheque No.
- Prepared by:
- Checked by:
- Signatures
- 1. Accounts officials
- 2. Accounts officer
- 3. Finance Manger

Standards/Censor/Quality

Previewing Pro-forma

As every network previews and checks the quality of programme before it goes on air so such forms are used to declare a programme fit for telecast.

The contents on this document are as follows:

- Programme title
- Sub-title
- Episode No

- Duration
- Date of Previewing
- Date of recording
- Date of editing
- Date of telecast
- Writer/Researcher
- Compere/Host
- Participants
- Music

1. Composer
2. Poet
3. Couplet of song
4. Vocalist

- Name of Producer
- Signature of Producer
- Remarks
- Observations
- Objection
- Signatures of Committee

1. Programmes Manager
2. Script Editor
3. Member

- Re-edited as suggested on Tape
- Needful done
- Signature of Producer

Gate Pass

The contents on this document are as follows:

- Entry Slip
- Purpose of visit

1. Audition
2. Discussion
3. Recording

- Programme3
- Date
- Time
- Name of the talent
- Signature of Assistant Producer
- Signature of Producer

Transport Requisition

The contents on this document are as follows:

- Date of submission
- Name for whom transport is required
- Date on which transport is required

- Designation
- Department
- Places to be visited
- Person to be contacted
- Name of Programme
- Episode No.
- Purpose of visit
- Nature
- Signature of transport requisition
- Signature of Departmental Head
- Log book to maintain record of vehicle

Duty roster of Camera Department

The contents on this document are as follows:

- Cameraman
- Camera Assistant
- Light man
- Cable man
- Audio Engineer
- Boom Operator
- Name of Programme
- Names of camera man
- Names of Camera Assistant
- Names of Light man
- Respective Studio
- Time and date of VTR
- Name of Producer

Schedule of ENG Store

The contents on this document are as follows:

- Name of Programme
- Names of Audio engineer
- ENG Unit
- Equipment required
- Name of Producer
- Gate pass

Daily working schedule

The contents on this document are as follows:

- Name of Programme
- Name of Producer
- NLE and Linear Editing
- Editing Suites
- Recording Studios
- Audio mixing

Daily Cue sheet

Complete List of the programmes to be aired that day.

Advertisement sheet

Complete account of commercials to be run during programmes

Fix point chart

Future transmission plan for the Quarter (13 weeks)

LESSON 44**COORDINATION AMONG DIFFERENT DEPARTMENTS OF TELEVISION - 2
SUB-DEPARTMENTS AND SMALL SECTIONS
(ENGINEERING, TRANSPORT, FINANCE, ACCOUNTS AND MARKETING)**

In previous lectures we have discussed the television setup and its departments on international level as well as on national level but in this lecture we will focus the sub-departments and smaller sections in a telecast organization which obviously are of very simple structure and not as much of size like other departments but these contribute a lot in the process of production rather it would be appropriate to say that the production is not even possible without the collaboration and cooperation of such sections.

The Departments on international level include Sales, Entertainment, owned and operated stations, Affiliated Relations, News, Sports, Standards and Operations while the departments on national level include Human Resources or Administration & Personnel Department, Programmes Department, News Department, Current Affairs Department, Sports Department, International Relations Department, Engineering Department, Training Courses, Marketing, Information Technology and Finance Department.

The Sub-Departments of television set up include Programmes Department, Camera Department, Design Department, Make-up and Presentation Section.

Now we will discuss the role and functions of these sub-departments and related smaller sections.

Sub-Departments**Programmes Department**

This Department deals with the production of general entertainment programmes. It is headed by a Programmes Manager and has Producer Programmes administration, Script Editor, Executive producers of different kinds of programmes like Music, drama, documentary, events and general assignments. All the senior producers, producers, associate producers, and assistant producers as well as programme assistants and production assistants are part of this department.

Camera Department

This is a sub department of programmes production Department. It is headed by chief cameraman and is supported by senior cameramen, cameramen, camera assistants, light men, lighting assistants, cable men and still photographer. These all staff members work as per their duty schedule and the recordings of the programmes.

Design Department

This department is responsible for set designing and erection of sets in the studios and outdoors of various a TV network programmes. It is headed by the Design Manager and consists of senior designers, designers and associate designers along with other support staff like welders, carpenters, painters and studio hands to facilitate a producer for the recordings of different indoor as well as outdoor programmes.

Make-up

This is also a sub-section of programmes department and it deals with the makeup, makeovers and get-ups of the talents according to the nature of their performances. The Chief make-up artist heads it and then there are both male and female make-up artists to make the actors, anchors, comperes and newscasters, screen-friendly by their partial and full makeup as the heavy and flooding lights of studio make the faces too bright and intense on screen if there is no makeup treatment done on the faces of talents.

Presentation Section

This section comes under programmes department and is headed by a Presentation chief followed by the transmission supervisors and duty officers to handle the scheduling and telecast of programmes and advertisements. The section at any station has a liaison with the Programme planning department at headquarters to make the daily cue sheet and the quarterly fixed-point chart.

Other related sections**Script Section**

This section receives all the ideas submitted by the producers and other corners. It also evaluates the scripts of all the programmes. All kinds of drama scripts as in series or serial, linking scripts as in magazine shows, research scripts as in documentaries as well as lyrics of songs are submitted and checked by the script section. Moreover the script editor is also the member of the previewing committee. It comprises of a script clerk who stamps the scripts for payment to the writers and researchers.

Library

This section is normally supervised by script section and has the broadcast media and television production related books for the study of producers to keep them enlightened. National and international Urdu and English dailies are also placed for latest updates in economic, financial and political scenario.

Panning Cell

Planning cell a vital part of programmes department is headed by a Senior Planning Officer. This cell issues different working schedules and facilitates the producers to make all kinds of planning for the recording of different programmes.

Traffic Cell

This cell keeps the record of Masters tapes, Blank tapes and Chunk tapes issued and received by the different producers. It notes down the previously recorded programme on the tape or tapes to be given which have been televised or used and declares that now the tape or tapes can be used for the purpose shown on schedule after checking carefully in the presence of concerned producer. However VTR engineer and producer are also requested to check each tape well before the scheduled work.

ENG store

This section is responsible for issuing ENG equipment which includes Neck microphone, Hand microphone, Cordless Neck Microphone, Cordless Hand Microphone, Boom / fish-pool Microphone, Baby light, Kit light, Sun gun, Ultra light, Reflector, Battery Charger and Monitor.

Technical Store

This is responsible for issuing technical equipment like batteries, cells, CDs, adapters for mini DVs and the maintenance as well as repair of any equipment damaged during the recording of a television programme.

Properties store

This is responsible for providing all material to be used on the set. The producer of the programme to designs department intimates all the required properties on the set of a television programme. The supply, hire or purchase of the properties is the responsibility of this section.

Wardrobe

This section keeps all kind of dresses and costumes and get-ups to be used by the artistes and for the performers in dramas. The dresses are kept in the wardrobe to maintain the continuity in appearance of a serial or series.

Studio

The actual place where the all activities take place during recording and it includes floor and horizon, cameras and boom microphones, set of the set, lighting grids, platforms, seating arrangement for audience participatory programmes, place for the artists and the technical staff.

Workshops

It is the work place for welders, painters and carpenters to prepare and install the sets in to the studios.

Transport

This section is responsible for providing logistic support to the producer. The fleet of all the vehicles is controlled and managed by the transport officer or supervisor.

MCR

Master Control Room is the place from where the final output signal received from the studios is telecast with the superimpositions of the names, emails, telephone numbers, titles, end credits and last but not the least the channel logo.

VTR

Video Tape Room is the used for a consolidated activity of editing, music mixing, sound effects, graphics and animations a programme. The linear editing and NLE is also done in this section. Moreover it records the live programme for the archives of the channel.

PCR

Production Control Room is normally known as panel and it includes monitors wall with cam 1, cam 2, cam 3 etc. Camera Control unit with waveform monitors, audio console, vision mixer or switcher, recording equipment and lighting switchboard. It is the technical are to get and process the resultant output by the cameras placed into the studios.

CRE

Central room for Equipment is adjacent to master control room and is responsible to throw the signal off air through transmitter as it has all the technical equipments for this purpose. It collaborates with the other channels of same network.

AFU

Audio Facility Unit is the section that has the archival audio pieces, all kinds of sound effects and different types of music to be used for various programmes. Capable and competent audio engineers handle all work in this section.

Graphics

This section is responsible for Animations, titles, end credits, super-imposed material and chroma keying. Moreover the results of events, graphs and other relevant visual material like still photos and drawings are also prepared by this section.

Duty Officer

This office monitors the transmission going on air and keeps a record of what all goes on air including programmes and advertisements. Moreover this section also deals with the payments to the talents of different TV programmes.

Media Cell

Media Manager or Public Relations officer works for press coverage, protocol duties, media liaison, publicity and advertising, image building and public opinion formation. He or she welcomes the TV journalists, arranges media briefings for the channel, manages launching shows, plans premier show and issues news and photo releases to the print media.

Security

The security officer along with the group of guards keeps an eye on all the expensive technical TV equipment and the other movements in a TV station. It keeps the record of all kinds of visitors.

Exchange

It is essential part of a TV set up for the internal and external communication and coordination with the co-workers and talent.

Reception

It is to receive and facilitate the talent, artists, participants and visitors with gate passes.

Canteen

It is for the refreshment of employees and artists coming for recording of a programme.

LESSON 45**COORDINATION AMONG DIFFERENT DEPARTMENTS OF TELEVISION 3
(TECHNICAL STORE, LIBRARY AND TRAFFIC)****RECAP OF THE COURSE****Lecture # 1****Creativity and idea generation for television**

Importance of Television among other media
 Other tools of Communication
 Purposes of television
 Picture is the base of Television Production
 Phases in preparation of a TV programme
 The functions and responsibilities of a Producer
 Video Procedures/ Production
 TV Production Crew Positions
 Future Trends-High Definition Television

Lecture # 2**Pre-requisites of a Creative Producer/Director**

Creative / Innovative /Analytical / Logical / Critical / Deep observation / Vast study/ Visualization power / Decision power / Sense of humour / Sense of proportion / Acute conclusion / Common sense / Aesthetic sense / Great exposure / Editorial judgment / Self starter / Initiative / Team leader / Forbearance / Tolerance / Practical experience / General knowledge /Courage / Confidence / Bravery / Time management / Accuracy / Precision / Conviction / Consistency / Ethics / Communication / Motivation / Determination / Patience / Fairness in controversy / Disinclined / Unbiased / Unprejudiced / Investigative / Informative / Inquisitive / Objectivity / Subjectivity / Technically sound / Pleasant personality / Command and control

Lecture # 3**Refining an idea for Production**

Ingredients for the presentation of an idea before the execution of a programme

- **Title** Name of the programme
- **Type** Form of programme
- **Language** Mode of communication
- **Genre** Kind of contents
- **Frequency** Rate of telecast
- **Duration** Length of time
- **Target audience** Potential viewers
- **Format** Arrangement of sequences
- **Theme** Central idea

Title**Type****Drama**

Drama serial /Drama series/Soap serial/Mini-serial/Sit-com situational comedy/Long play/Tele-film/Short film

Magazine Shows

Talk show/Music show/Celebrity show/Health show/Commerce show/Road show
 Game show/Cooking show/Beauty show

Documentary

Historical /Informative/Investigative/Docu-drama

Specific audience programming

Religious programmes/Women programmes/Children programmes/Sports programme/News programmes/Current affairs programmes/Views and comments programmes/Analytical programmes/Opinion formation programmes

Language

International as English, Arabic, French/National as Urdu, Persian, Chinese/ Provincial as Punjabi, Sindhi, Pashtu, Balochi/Regional as Saraiki, Hindko, Barahvi, Gujrati

Genre

Comedy/Tragedy/Action/Thriller/Adventurous/Romantic/Fiction/Historical/Epic/ Science fiction/Fantasy

Frequency

Daily/Weekly/Fortnightly/Monthly/Quarterly/Biannually/Annually

3 minutes/5 minutes/10-15 minutes/25 minutes/50 minutes/90 minutes

Target audience

General public /Youth /Students /Kids /children /Women /Senior citizens /Formers /Peasants/ Businessmen /Industrialist /Traders /Educationist /Lawyers /Doctors /Workers /Researchers

Format

It is arrangement of the programme and the order of the appearance of performers, artists or the participants.

Theme

It is the central idea of any programme, normally called the one-liner in the telecast industry.

Lecture # 4**Concept Development**

Concept/A general notion/A conception/A comprehension/A construct/A thing formed in the mind/A directly conceived or intuited object of thought/An idea of something formed by mentally combining all its characteristics or particulars/A general idea derived or inferred from specific instance or occurrence

The **concept development** is next step; a producer has to take after **generation of an idea** and before its **execution**. Before we take concept in the scenario of production, let's discuss the concept in mass media research perspective.

Construct

A construct is the combination of two concepts. For example "Mass" is a concept, "Media" is again a concept and the "Mass Media" is a construct which give a third meaning as a whole phrase. These concepts in researched studies are measure as variables.

Variable

It is the changing value of quantity or quality of a thing or concept is called variable.

Independent variable

It is the variable whose value is independent to change. For example "speed" is an independent variable. Media exposure may be the other example.

Dependent variable

It is the variable whose value is dependent to change. For example “distance” is a dependent variable. Socialization from media may be the other example. A dependent variable is dependent on the independent variable.

Intervening variable

It is the variable that effects the relation of the independent and dependent variable. For example in “quality of the road” is an intervening variable. Tune-in time may be the other example.

Extraneous variable

It is the variable, which does not directly influence the relation of independent and dependent variable. It is not as pertinent as an intervening variable.

Types of research

Pure and applied research is Scientific or laboratory research.

Descriptive research is Social or library research.

Qualitative research deals with the qualitative variables

Quantitative research deals with the quantitative variables

Lecture # 5**Research and reviews****What is research?**

Research is constant navigation to know the truth/Continuous effort to dig out facts/an endeavour to find something new/Making new interpretation of existing knowledge/Research is an addition to already present knowledge.

According to a mass media research expert Kerlinger, “It is systematic, controlled, critical and empirical investigation of hypothetical propositions about presumed relations among natural phenomena.”

Research Procedure

- Selection of a problem
- Research question
- Making hypothesis
- Review of available literature
- Experimental design
- Research suppliers
- Data collection
- Analysis and interpretation of data
- Presentation of research
- Replication

Lecture # 6**Script Writing**

The plot of any story, drama, novel, or play has following basic ingredients

Introduction	beginning
Complication	development of complications
Culmination	climax of conflict
Solution	resolution of issues
Conclusion	ending

A good script has following components:-

Purpose	to justify its viewer-ship
Simplicity	to make it look true
Familiarity	to be directly communicable

Elements of a successful story

Extraordinary swiftness
 Economy of words
 Rapid development of situation
 Promise of future development
 Immediate attention
 Powerful atmosphere
 Striking characterization
 Intriguing unusual setting
 Extremely usual setting

Do's in script writing

Opening should be catchy to hold the audience
 The style, diction and contents should introduce the play
 Logical development of the story is necessary
 Tempo to be fast.
 Planned forward action.
 Element of suspense is vital.
 Surprise grabs the attention.
 Language should be used according to situation and story.
 Definite ending is a must for a story.
 All problems to be solved in the end.
 All characters accounted for what they have done.
 A tragic or unhappy ending may be satisfactory if a moral can be deduced.
 Policy matters to be dealt carefully.

Don'ts in script writing

Profanity and blasphemy
 Vulgarity and obscenity
 Belittling of any race or caste
 Criticism on any religion or sect
 Physical deformities not to be made humorous.
 Crime, murder and suicide to be discouraged
 Degrading any colour or creed
 Use of poor grammar
 Offending humour
 Offensive statements
 Too talky script
 Unintentional interruption to be avoided
 Words with multiple meanings to be shunned

Characters**Actor-proof script****Effects****Length****Manuscript****Submitting the manuscript****Script Paper**

Camera Shot Sheet**Editing Log****Storyboard****Fax Request****Equipment Reservation Form****Lecture # 7****Pre-production phase**

There are two kinds of productions technically and both require different prerequisites in pre-production phase.

- Indoor production
- Outdoor production

Director as producer

The Director is called Producer in TV production as s/he handles the financial matters along with all other issues regarding programme. For any indoor or outdoor production the first thing is to prepare a budget.)

There are certain things a Producer has to plan before any production, which include:-

- Talent
- Electronic News Gathering (ENG)
- Characters or performers
- Storyboard
- Outdoor Production
- Reconnaissance
- Travelling expanses
- Unforeseen expenditures
- Programme Budget Proposal (PBP)
- Programme Budget Estimate (PBE)
- Essentials of PBE
- Talent fee
- Script fee
- Research fee
- Transportation
- Logistics
- Accommodation
- Unforeseen expanses

Indoor Production

The requirements for indoor productions are different than that of outdoor productions, it include:

Set designing**Properties**

- Set designer
- Lighting director
- Cameraman
- Editor
- Director

The director should aim at audience;

- To develop dislike for what is unfair and untrue
- To develop disgust for which is cheap and substandard
- To develop indifference for which is trivial and meaningless
- To develop enthusiasm for what is fine true and important

The director for oneself should develop the habit of;

- Self-control
- Self-respect
- Self-reliance

Studying the script**While studying a script a director should:**

- Digest the script to get the real mood and feeling.
- See that the script is approximately of right length
- Suggest small changes if required to better the performance
- Hear the whole script, as one reading is not enough

Lecture # 8**Selection of required Content and talent**

The **casting committee** is concerned of two things:

What comes out at the screen?

What happens in the minds of viewer?

The director watches following things for the flexibility of performance:-

- Displaying an understanding of lines
- Varying speed according to material
- Expressing emotions without shouting
- Giving expressions, stresses and pauses
- Throwing cue lines to co-artists
- Delivering the dialogue in true spirit

Having decided upon the selection of the artists, the producer should fix the time of rehearsals, which include:-

- Simple rehearsal
- Dry rehearsal
- Camera rehearsal
- Full rehearsal
- Final rehearsal

It is good idea to cut a script down for required number of rehearsals and many factors enter in to determination of answers;

- The script itself
- The ability of the artists
- The amount of time
- The degree of difficulty
- The efficiency of director

Run Through

First Rehearsal
Second Rehearsal
Talent
Forms
Talent Release Form

Lecture # 9
Programme planning

Outdoor Production Checklist

Camera/Neck microphone/Hand microphone/Cable microphone/Cordless microphone /Baby light/Kit light/Sun gun/Monitor/Reflector/Tapes/Battery charger/Transport/Make up/Costumes/Confirmation of participants/Location management/For outstation recordings/ Tour authorization/ Accommodation/ Boarding and lodging

Technical staff required

Director/Cameraman/Light man/Boom operator/Driver

Indoor Production Checklist

Studio requisition/Three Cameras/Neck microphone/Hand microphone/Cable microphone/Cordless microphone/Set installed/Lighting/Panel/switcher/Camera control unit/Audio console/Cassette Recorders/Cassette Players/Functional Monitors/Tapes/Makeup/Properties/Wardrobe/Costumes/ Confirmation of participants/Gate passes

Technical staff required

Director/Cameramen/Lighting director/Light men/Boom operator/Camera Control Unit (CCU) engineer/Audio engineer/Recording Engineer/Set designer/Studio hands/Floor managers

Outdoor Broadcast (OB)

Electronic Field Production (EFP)

Talk shows/Live coverage/Music show or concert/Mega shows/Award ceremonies/Sports events/Approval of authority for the venue/Security management/Refreshment of artists and staff/Continuities

- Continuity of dialogue/ Situation/Dress/Makeup

Assistant Director
Floor Director
Audio Engineer
Camera Operators
Videotape Operators
Technical Director
Production Assistant (CG Operator)

Lecture # 10
Production phase

Floor plan

Traditional set/Contemporary set/Lighting set/Black screen set/Single screen set/Two-screen set/Three-screen set

Non-representational set

News/Interviews/Talk shows/Forums/Political discussions/Analysis and opinion/Religious programmes

Representational set

Drama/Show/Documentary/Celebrity show/Magazine show/Science show
Children show/Women show

Abstract sets

Musical concerts/Mega shows/Extravaganza/Variety show

Design elements

Line/Shape/Texture/Space/Size

Work procedure of design department

Producer designer discussion/Planning/Concept/Floor plan/Producer's approval/Budgeting/Purchase process/Property store/Carpenter workshop/Welding if any/Painting workshop/Erection of set in studio/Set decoration/Recording/Dismantling after recording/Make up techniques/Essentials of Make up/General treatment/Nose treatment/Eye treatment

Lecture # 11

Camera Work

Camera functions

Movement of lens of camera

Zoom in /Zoom out/Focus/Defocus

Movement of camera itself

Pan right/Pan left/Tilt up/Tilt down

Movement of camera with tripod

Dolly in/Dolly out/Track right/Track left

Use of crane/Jib/Wide-angle lens/Fish-eye lens

Types of shots

Extreme close up (ECU)/Big close up (BCU)/Close up (CU)/Medium close up/bust shot (MCU)/Medium shot (MS)/Medium long shot (MLS)/Long shot (LS)/Very long shot (VLS)/Top or High angle shot (looking downwards)/Low angle shot (looking upwards)/Two shot (can be CU/MCU/MS)/Over the shoulder shot (OTS)/Moving subject walking into space/Differential shot

Video Equipment

Studio Cameras

The Camera

Lens:

View Finder:

The Camera Mount

Movement Camera Operation

Before the Shoot

During the Shoot

After the Shoot

Lecture # 12

Light and Audio

Types of cameras

Handy camera/ENG camera/Full facility camera/Digital camera/XD camera/Beta camera

Models in use

PD 150/PD 170/D 350/D 390/D 250 P/D 35 P/16 MM/35 MM/70 MM

Types of tapes/disks

Video/VTR/U-matic/Beta/DVC Pro/DV cam/Mini DV/VHS/VCD/DVD/Audio/Magnetic tape/CD/DAT/Importance of sound in TV

Use of microphone

When you choose a microphone, you should know four things.

What type it is?

What are its directional characteristics?

What does it sound like?

What it looks like?

Types of microphones

According to technique

Moving coil or dynamic/Ribbon/Capacitor or condenser

According to direction

Omni or Multi-directional (picking sound all around)/Bi-directional (Front and rear)/Uni-directional (from front only)

According to usage

Neck microphone/Hand microphone/Cordless neck microphone/Cordless hand microphone/Cable neck microphone/Cable hand microphone/Boom handy (outdoor)/Boom on tripod (indoor)

According to programme

Drama/Talk show/Music/Magazine show/Documentary

Television Sound: The Basics

Loudness

Frequency

The Frequency-Loudness Relationship

Listening Conditions *bass* and *treble*

Room Acoustics

Microphones

Dynamic Microphones

Condenser/Capacitor Microphones

Ribbon Mics

Boundary Effect Mics

Contact Mics

Directional Characteristics

In microphones there are three basic directional categories:

Omni-directional

Bi-directional

Unidirectional

Cardioids

Super-cardioids

Hyper-cardioids and Lobar

Shotgun Mics

Parabolic Mics

Using Off-Camera Microphones

Microphone Booms

Hanging Microphones

Hidden Microphones

Phase Cancellation

- Place mics as close as possible to sound sources
- Use directional mics

- Turn down mics any time they are not needed
- Carefully check and vary distances between the sound sources and multiple mics to reduce or eliminate any cancellation effect (A speaker's mic should be placed at one-third or less the distance of the next nearest mic.)

Lecture # 13

Day of Recording/Production

Pre-requisites for Indoor Production

Studio requisition/Planning schedule/Studio facilities/Three Cameras/Microphones

Set installed/Any change in required/Lighting/Panel/switcher/Camera control unit/Audio console/Cassette Recorders/Cassette Players/Functional Monitors/Plasma/Telephones /Tapes/Make up/Properties/Wardrobe/Costumes/Confirmation of participants/Pick and drop/Gate passes/Technical staff/Rehearsals

Producer during recordings:

Do not fatigue the crew with odd moves
Do not burden the artist with retakes
Do not spoil the mood of recording
Do not be panic while at work

Camera Moves and mechanism of recording

Noting on script or register

Communication during recording

Talk back microphone for the compare/anchor/host

Studio microphone to address the audience

Head phone to communicate with cameramen

Tele-light

Pre-requisites for single camera Outdoor Production

Single Camera/Microphones/Lights/Monitor/Reflector/Tapes/Battery charger/Transport/ Make up/Costumes/Confirmation of participants/Location management/For outstation recordings/Tour authorization/Accommodation/Boarding and lodging

Floor management

The production staff/Producer/Director/Assistant director/Lighting director/Designer/Production assistant/The production crew/Cameraman/Audio engineer/Audio technicians/Video technicians/Floor manager/Studio hands/Studio supervisor/Switcher/Recording engineer/The Control Room/The studio floor

The day of recording

Research /Scriptwriting /Dramatization /Screenplay /Storyboard /Rehearsals /Dialogue delivery /Accent /pronunciation /Teleprompter machine

Video Tape Recording

VT Controls/Patching/Monitoring/Recording/Audio Equipment/Remote Start/ Timing/ Equalization / Mix Minus/Monitoring/ Developing an Ear/Audio Cart/Compact Disc Player

Auxiliary Equipment

Intercom

Videotape

Lecture # 14

Linear editing and NLE

Film is a director medium.
 Theatre is an actor medium.
 Radio is a speaker medium.
 Television is a producer medium.

Episode/Scene/Take
 Editing/Player 1/Player 2/Recorder

Types of Editing

- Linear Editing
- Non-linear Editing (NLE)

Editor

Production Switcher

Lecture # 15

Mixing and Uses of effects

Mixing and Uses of effects is to beautify a production. It fills the colours in the programme with the use of animations, graphics, windows, brackets and effects like, Zoom out, Zoom in, Page turn over, Dip to black, Fade in, Fade out, Dissolve, Cross fade, Wipe, Swap. Moreover Colour tone, Title, End credits, Breaks, Bumpers, Scroll, Strips and Superimpositions like Names, Callers, Phone numbers, Email, Website is also done by mixing, as well as Promo and Recap are also prepared. Music is also adjusted in by audio mixing by keeping music in fore ground, mid ground or background. Choice of music is exercised in it and Sound levelling is done.

Lecture # 16

Selection of the News

What is News?

News is some thing or matter new, fresh, unusual, unique, strange and exclusive.

It may be defined as accurate fact or idea that will interest a large number of viewers. In a news strangeness, abnormality, unexpectedness and nearness of and event, all add to interest in the news story.

The American College Dictionary defines news as “A report of any recent event or situation and as the report of event published in a newspaper”

According to Lord Northcliffe’ “if a dog bites a man it is no news but if a man bites a dog it’s news.”

News is in fact a communication between human beings from the earliest period of human civilization.

News is information about an event, some development plan, and movement of important persons as it is said, “big names make big news.”

Qualities of news

Accurate /Balanced /Truthful /Recent /Exact /Perfect /Objective /Impartial /Unbiased / Disinclined/
 Concise /Short /Brief /To the point /Clear

Elements of news

Timeliness /Immediacy /Proximity /Consequence /Prominence /Suspense /Mystery /Oddity /Conflict
 /Progress /Action /Interest /Human Emotions

News and Documentary Production

Twelve Factors in Newsworthiness

Timeliness/ proximity/ exceptional quality /possible future impact/ prominence/ conflict / the number of people involved or affected/ consequence/ human interest/ pathos/ shock value/ titillation component

Lecture # 17

Writing of the News

How to write the news?

The inverted pyramid

Contents of news

What?	What happened? What is the event?
When?	When it occurred, at what time it took place?
Where?	The place, where the incident occurred.
Who?	The persons involved at that occasion.
Why?	The reason of that particular issue.
How?	The sequence of the event.

Lead/Intro/Credit line/Body text

Types of news according to contents

- News based on facts
- News based on statement
- News based on action

Lecture # 18

Editing of the News

Editing and rewriting the news

Characteristics of good news

Process of editing news

Lecture # 19

Compilation of News Bulletin

Compiling a News Bulletin

- **Hard news/Soft news/Investigative report**

Lecture # 20

Presentation of News Bulletin

Types of news telecast

Continued story

Lecture # 21

Making Special Bulletins

Trade/industry/Commerce/business/Agriculture/Sports/Show biz/Fashion /Music/ Drama/ Weather/ Educational/Religious/Health/Scientific/Food/Documentary/Investigation/ Youth/Women

Lecture # 22

Technical Codes, Terminology, and Production Grammar

Creativity/Idea /Concept /Casting/Script or Screenplay/Research/Rehearsal/Cameraman /Frame /Shot/Television studio/Studio Floor/Light /Set design/Survey for location/Microphone/Videotape/Camera Control Unit/Switcher/vision mixer/Panel /Audio Mixing Console/Production control room/Video monitor wall/ Video editing/Non-linear editing/Video camera/Electronic field production (EFP)/Electronic News Gathering/Teleprompter

Lecture # 23

Types of TV Production

- The scriptwriter's command of dialogue
- The researcher's in-depth knowledge
- The actor's power of oratory
- The performer's suitable expression,
- The makeup artist's subtle touch
- The lighting directors controlled shadows,
- The set designer's environmental influence,
- The cameraman's reflections,
- The audio engineer's skill in blending music,
- The mixing expert's sound effects,
- The editor's presentational talent,
- The producer's command and control

Magazine Shows

Talk show/Music show/Celebrity show/Health show/Commerce show/Road show/Game show/Quiz show/Kids show/Fashion show/Women show/Cooking show/Beauty show/Reality show

Specific audience programming

Religious programmes/Women programmes/Children programmes/Sports programme/News programmes/Current affairs programmes/Views and comments programmes/Analytical programmes/Opinion formation programmes

Genre

Comedy/Tragedy/Action/Thriller/Adventurous/Romantic/Fiction/Historical/Epic/Fiction /Science fiction/Fantasy

Lecture # 24

Drama and Documentary

Drama is the specific mode of fiction represented in performance. It is derived from a Greek word meaning "action" or "to do".

Drama

Drama serial /Drama series/Soap serial/Mini-serial/Sit-com situational comedy/Long play/Tele-film/Short film

Documentary

Historical /Informative/Investigative/Docu-drama

Lecture # 25

Sources of TV News

SOURCES OF NEWS

Reporters/Correspondents/Monitoring/Press releases from public sector organizations/Press note from the district management/Handout from DGPR and PID/Directorate General of Public Relations and

Press Information Department/Media contacts/Opinion leaders/Politicians/Celebrities/Players/Media icons/Press conferences/Media briefings/Important function,/ceremony, workshop, seminar or symposium/Hospitals/Socialinstitutes/Policestation/Firebrigade/Jails/Courts/District offices/Educational institutions/Chambers of commerce and industry/Banks State, Scheduled, Agriculture and commercial/News agencies/Corporate sector/Public gathering/Web sources/News papers/Reporters /Correspondents Monitoring /Press release /Press conference /National and International News Agencies:

Lecture # 26

Functions of a Reporter

There are following functions of a television reporter:-

To cover the city events/To lead the production team/To make the news reports/To move into respective beats/To go to press conferences/To attend the media briefings/To jot down the notes/To gather the news/To dig out the news/To have liaison with PROs/To get the relevant documents/To write a news/To rewrite a news/To edit a news/To make the quick decisions/To select a newsworthy occurrences/To investigate the reasons of an incidents/To write down follow-up stories/To have acquaintance with existing situations/To have general knowledge/To have time management/To be a team leader/To be good at language/To follow press laws/To abide by code of ethics/To be socially responsible/To avoid sensationalism/To have decision power.

Lecture # 27

Beats of Reporting

City reporter /Social reporters /Crime reporter /Political reporter /Court reporter /Health reporter /Agricultural reporter/Religious reporter /Commerce reporter /Education reporter /Social reporter /Show-biz reporter /Sports reporter /Women reporter /Youth reporter /Fashion reporter /District reporter /Special reporter /Cultural reporter /Development reporter

Lecture # 28

Structure of News Department

Staff reports/Wire services/Feature syndicates/Handouts/Releases

City Editor /Beat Reporters /General assignment reporters/Managing Editor /Assistant Managing Editor /Copy Editor /Managing Editor

Organization of a newspaper news room

Managing editor/City editor/Wire editor/City editor/Photographers/Reporters/Beat reporters/General assignment reporters

Organization of a TV news room

News director/Executive producer/Assignment editor/ Producers/ Reporters/Editors

Organization of an online newsroom

Executive editor/Producer/Design managers/Producer/Editors/ Reporters/Design managers/ Multimedia designers/ Web technicians

Lecture # 29

Electronic Field Production

Electronic field production (EFP)

A large video switcher, with an external digital video effects unit and several mix/effect equipment. zoom lenses for the tripod-mounted "hard" cameras/ Several video recording and playback devices such as VCRs or hard disk recorders. An audio mixing booth and a variety of microphones to capture audio. Several miles of various types of cable.

Electronic News Gathering

Microwave trucks seen transmitting. Modern news employs these trucks extensively. ENG is a broadcasting (usually television) industry acronym which stands for Electronic News Gathering. It can mean anything from a lone reporter taking a single camcorder or camera out to get a story to an entire television crew taking a satellite truck on location to do a live report for a newscast.

Lecture # 30

Live Transmissions

Television studio

Studio floor

Decoration and/or sets

Cameras on pedestals

Microphones

Lighting rigs and the associated controlling equipment.

Several video monitors for visual feedback from the production control room

a small public address system for communication

A glass window between PCR and studio floor for direct visual contact is usually desired, but not always possible

While a production is in progress, the following people work in the studio floor.

The on-screen "talent" themselves, and any guests - the subjects of the show.

A floor director, who has overall charge of the studio area, and who relays timing and other information from the director.

One or more camera operators who operate the television cameras, though in some instances these can also be operated from PCR using remote heads.

Possibly a teleprompter operator, especially if this is a news broadcast.

- **Production control room**
- **Video monitor wall**
- **Switcher**
- **Master control room**
- **Camera control units**
- **Other facilities**
- **Technical facilities**

Telephone for live calls

- Toll free numbers
- SMS
- Intercom

Computer for emails

- Feed back
- Opinion poll

Microphones

- Talk back
- Studio mic.
- Headphones

Emergency kit

The tapes having pre-recorded programmes in case of emergency.

Generator facility

The alternate supply in case of electric power failure.

Elements of a television system

An image source. This is the electrical signal representing the visual image, and may be from a camera in the case of live images, a video tape recorder for playback of recorded images, or a film chain-telecine-flying spot scanner for transmission of motion pictures (films).

A sound source. This is an electrical signal from a microphone or from the audio output of a video tape recorder or motion picture film scanner.

A transmitter, which generates radio signals (radio waves) and encodes them with picture and sound information.

An antenna coupled to the output of the transmitter for broadcasting the encoded signals.

An antenna to receive the broadcast signals.

A receiver (also called a tuner), which decodes the picture and sound information from the broadcast signals, and whose input is coupled to the antenna.

A display device, which turns the electrical signals into visual images.

An audio amplifier and loudspeaker, which turns electric signals into sound waves (speech, music, and other sounds) to accompany the images.

Lighting director (LD)

Lecture # 31

Qualities of a news producer

The following are the qualities and characteristics to be a news producer. Some of the qualities can be inculcated, some can be improved, but still there are certain qualities, which are inborn, and a person needs to have them to be a media man.

Determination / Knowledge / Awareness / Imaginative / Sense of humour and wit / Inquisitiveness/ Sharp an active/Curious/Observation /Social and sociable/Active and Dynamic /Well informed /Courteous and well behaved /Intelligence /Specialized in the beat/Law-abiding/Qualified/Creative and Innovative /Decisive

Lecture # 32

Duties of a news producer

Here are some of the things that a news producer does.

1. Decides which stories are covered, who covers them, and how they are covered.
2. Decides the order in which stories appear in the newscast
3. Determines the amount of time each story is given.
4. Writes copy for some stories.
5. Integrates live reports into the newscasts.

Points to ponder while making a special bulletin

1. Start strong as well begun is half done.
2. Read and understand your source copy.
3. Underline and circle the key facts.
4. Think don't write yet.
5. Write the way you talk.
6. Have the courage to write simple.
7. Refrain from wrong warm-ups.
8. Limit a sentence to one line only.

9. Use short words and sentences.
10. Utilize familiar words and combinations.
11. Humanize your copy and localize it.
12. Do not start with quotation or question.
13. Put word or words you wish to stress at the end of your sentences.
14. Omit needless words from your copy.
15. It should highlight the best part.
16. Don't just duplicate your source copy.
17. When in doubt, leave it out.
18. Don't raise questions, you do not answer.
19. Read your copy loudly and if it does not sound good, rewrite it.
20. The art of making news lies in rewriting what you have already written.

Lecture # 33

Assignment/News Editor

Reporters/Camera crew /News editor /News editor

Organization of a TV news room

News director/Executive producer/Assignment editor/ Producers/ Reporters/Editors
 Writing news with Accuracy/Fairness and Reliability/Factual position/Nearness and
 proximity/Conflict/Suspense and mystery/Oddity and novelty/Prominence/Consequence

Lecture # 34

Shooting a News film

News Production

The Difference between ENG and EFP

Handling Controversial Subject Matter

Like Any Good Scout, Be Prepared

Video Journalists (VJs)

ENG Personnel

News producer

Segment producers

Executive producer

On-air director

ENG coordinator

Assignment editor

Lecture # 35

Preparation of special reports

Investigative journalism/Uncovering Truth/Reportage/Literary reportage /Investigative journalism /The Investigation

Means reporters can use for their fact-finding:

Consequences

Breaking news/Format/Usage/Criticism/Know Your Story

Covering News vs. Making News

At Times, A Dangerous Profession

News and Politics

Lecture # 36

Interviews, vox pops and public opinions

Setting Up A Typical On-Location News Interview

Reporter's Checklist
News Producer's Checklist
News Bias

INTERVIEW for Assessment or Information
Ego /Publicity/Money/Helpfulness

"off the record"/"Background"/"deep background"/"attribution" /"a source in ""burnt source"

Lecture # 37
Back Ground voice and voice over

Natural or Raw Sound /Sound Effects /The mixing /Voice-over
Types and uses of voice-over /As a character device /As a creative device/As an educational or descriptive device/As a commercial device
 Voice types and the cords themselves
 Vocal registration (pitch, volume, timbre)
 Sound/Equipment for dealing with sound

Lecture # 38
Spoken words and relevant visuals

Role and importance of audio in TV production, including **audio mixing, analog and digital audio, audio control devices, Audio Recording, Editing and Playback, Video Switchers and Special Effects, Chroma Key and lip-synching** i.e. synchronizing audio with the video.

Copying vs. Cloning/Converting Analog to Digital/Quantizing Error/Optimum Digital and Analog Audio Levels/Digital Standards/Digital Audio Time Code/Audio Control Devices /Boards, Consoles, and Mixers/Cue /Audition/Audio Mixer Controls/Level Control and Mixing/Using Audio from PA Systems/Audio Recording, Editing and Playback

Cart Machines
Compact Discs
CD Defects and Problems
Automatic Error Correction
Audio Recording, Editing and Playback

DATs (Digital Audio Tapes) are capable of audio quality that exceeds what's possible with CDs.
RDAT (recordable digital audiotape) is designed for professional applications, as are the very high quality ADAT machines (types I and II).
 DAT Time Code

Computer Hard Drives
IC and PC Card Recorders
RAM Audio Recorders
The I-Pod Era
Audio Editing Systems
Video Switchers and Special Effects
Chroma Key
Software-Based Switchers and Effects

Lecture # 39
Talk shows, forums and Discussion Programmes

Basic techniques to be followed in talk shows Interviewer will introduce the guest and ask question which will also tend to introduce him.

1. It is not bad plan to ask some rather light, frivolous questions that may start the programme with a spurt of humour, for this put the interviewee at ease and please the viewers.
2. It is essential that there be no pauses of any length, consequently the person who is doing the interviewing must be alert to discover the leads in the answers he receives.
3. First few minutes will be devoted to less serious discussion in order to brighten the subject and to encourage the interviewee to articulate comfortably.
4. There is a tendency to allow the interview to become argumentative but this should not be avoided because it makes the interviewer express his ideas, which are not of importance.
5. The interviewer must remember that he is not interviewing himself. His job is to ask stimulating questions, not to supply the answers; to bring out the interviewee's personality not of his own.
6. Do not try to influence the guest by leading questions. The person who is important enough to be interviewed must have something interesting enough to appeal the viewers.
7. Try to dig down and disclose the person off guard; by that it is meant that there should be revelation not the exposure.
8. The host should have the general knowledge so that he can ask good and intelligent questions about the relevant field of the guest and his interest.
9. Most of the questions should be of such nature as to require more than "yes" or "no" answers, however interviewee must not be forced to give too lengthy replies.
10. It is permissible for the anchor to raise his hand and interrupt the speaker if he gets started on an oration or a long speech.
11. If some definite topic is to be discussed, the questioner must strive to keep the speaker talking about the topic and lead him back to subject if necessary.
12. The talk must be natural and conversational. Mild laughter may be heard but it is not advisable for the announcer to laugh too heartily at his own comments.
13. Repetition in style of questions should be avoided such as starting questions with the word "well" or "I see" or "okay" and "fine" after each answer.

Lecture # 40

Functions of various departments of a TV set up

General Manager /Sales department /Engineering Department/Production Department /News Department/Administrative Department Sales/Entertainment/Owned and operated station /Affiliated Relations /News/Sports /Standard /Operations

Infrastructure or organizational set up and Working of a TV channel

Human Resources or Administration & Personnel Department/Programmes Department/News Department/Current Affairs Department/Sports Department/International Relations Department/Engineering Department/Training Courses/Marketing/Information Technology/Finance Department/Sub-Departments

Lecture # 41

Programmes department

Season or Series/"show" or "programme/Program content/Television series by genre

Scripted entertainment

Unscripted entertainment

Informational

Development

Pilot/13 episodes/Production/Executive Producer/Director /Director of Photography /Editor

Distribution/Seasons/Series

Lists by genre or characteristic

Animated series /Awards shows /Celebrity Shows /Children's television shows /Comedies /Comedies without laugh tracks /Cooking shows /Comedy-drama television series /Fantasy programs /Game shows /News programs /Reality programs /Satirical news programs /Science fiction sitcoms /Sketch comedy shows /Soap operas /Talk shows /Musical shows

Lecture # 42

News and Current Affairs

The programming & Scheduling

Getting TV programme on the air

TV broadcast programming

Scheduling strategies

Day-parting/Theme-ing/Stripping/Stacking/Counter-programming/Bridging/Tent-poling/Hammock-ing/Cross-programming

Programming

Original Run or First Run

Syndication

Funding

Television has played a pivotal role in the socialization of the 20th and 21st centuries. There are many social aspects of television that can be addressed, including:

- 1 Positive effects
- 2 Negative effects
- 3 Gender and television
- 4 Politics and television
- 5 Socializing children
- 6 Technology trends
- 7 Suitability for audience
- 8 Alleged dangers
- 9 Propaganda delivery
- 10 Educational advantages

Lecture # 43

Coordination among Different Departments of Television 1:

Forms and Documents

Programme Planning /ENG work schedule/EFP work schedule/VTR work schedule/Studio work schedule/Actual Information Report/Props. and wardrobe Requirement list/Programme Budget Estimate/Programme Budget Proposal/VTR Log book/Contract Form/ Standards /Censor /Quality/Previewing Pro-forma/Gate Pass/Transport Requisition/Duty roster of Camera Department/Duty roster of Camera Department/Schedule of ENG Store/Daily working schedule/Daily Cue sheet/Advertisement sheet/Fix point chart

Lecture # 44**Coordination among Different Departments of Television 2****Sub-departments and small sections**

Department on international level /Department on national level Sub-Departments /Programmes Department /Camera Department /Design Department /Make-up /Presentation Section

Other related sections

Script Section /Library /Panning Cell /Traffic Cell /ENG store /Technical Store /Properties store /Wardrobe /Studio /Workshops /Transport /MCR /VTR /PCR/CRE /AFU /Graphics /Presentation/Transmission /Duty Officer /Transmitter /Media Cell /Security/Exchange /Reception /Canteen