

K.Cullen  
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Television Graphics with emphasis on the graphics of  
Current Affairs Programmes.

A thesis submitted to the Faculty of history of art  
and complimentary studies in candidacy for the diploma  
in the Faculty of Design, department of visual  
communications.

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by

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## PREFACE.

Television as a means of communication plays an important role in our society here in the western world. It is hoped that this thesis will give a better understanding of television graphic design and will also be an aid to picking out the good or bad points in a piece of television graphics.

An analysis of some current affairs programmes will also be made. Current affairs television graphics are the purest form of television graphics, they must always be straightforward and to the point. An analysis of some of some of these graphics will give the reader a good understanding of the subject. Much typography is used in these programmes and as a graphic designer this is an area of particular interest.

In order to analyse the graphics of current affairs programmes, it is necessary to understand the limitations of the medium of television, the methods and equipment available to the designer and the basic design process.

There are two types of designer in television, the graphic designer and the set designer. Throughout this thesis when designer is mentioned, take it to mean the graphic designer.



## CHAPTER 1

### INTRODUCTION.

Television has brought information, entertainment and education into the homes of millions of men, women and children. The television set is a television set. The television picture can be turned on or off as a light switch. News, sports, drama, comedy, music, and a variety of other programs are shown in the form of a picture. There is no sound in this picture, and although some programs are better than others, they are quickly forgotten and forgotten as the next day's news comes. The television set is a television set. The television picture can be turned on or off as a light switch. News, sports, drama, comedy, music, and a variety of other programs are shown in the form of a picture. There is no sound in this picture, and although some programs are better than others, they are quickly forgotten and forgotten as the next day's news comes.

Graphic design in television differs widely from graphic design in other fields in that its communication is purely auditory. Although a picture, a picture of an advertisement can all be remembered for any information which may not have been fully communicated at first sight, the motion picture does not allow for any second thought. The visual idea or message must therefore be immediately absorbed. The correct word must be set within a very short space of time, the time allowed being relative to its importance.

From the point of view of the producer, television graphics are perhaps one of the most useful tools that he has at his disposal. The graphic designer



## GENERAL INTRODUCTION TO T.V. GRAPHIC DESIGN.

Television has brought information, entertainment and education into the homes of millions as most homes in the western world have a television set. The television picture can be switched on or off in a split second. Hours, days or weeks of work on a programme are reduced to nothing at the turn of a knob. There can be no masterpiece in this production line, and although some programmes are better than others, they are quickly devoured and forgotten as new ones take their place. Perpetual motion seems to have arrived with nobody possibly foreseeing the end of television. As an entertainer, television has had a long run, yet as an educator it has hardly begun.

Graphic design in television differs mainly from graphics in other fields in that its manifestation is purely momentary. Although a poster, a brochure or an advertisement can all be re-examined for any information which may not have been fully communicated at first sight, the motion picture does not allow for any second chances. The visual idea or message must therefore be immediately understood. The correct mood must be set within a very short space of time, the time allowed being relative to its importance.

From the point of view of the producer, television graphics are perhaps one of the most potent tools that he has at his disposal. The graphic designer



sells the programme to the public. The public like to see new ideas, the designer must always be inventive and original. The simpler a designer can put across his graphic ideas, the better his audience will absorb them.

Graphic design is concerned with the communication of visual information, comprising either typographic or pictorial elements or both. The enormous amount of graphics required by a programme is not always apparent because of its very purpose. For example, there are twenty four frames per second of film, that is for one second of animation there have to be twenty four slightly different pictures drawn or made up in order to obtain the required movement.



## RESEARCH INTO TELEVISION GRAPHICS.

Very little research has been carried out to help the designer improve his effectiveness. Media research has concentrated on the effects of individual programmes, series or overall features such as violence on television. There are no generalized statements to guide programme makers. One can discover pretty accurately whether or not a programme has reached its objectives but one can not point out why it has succeeded or failed. Until the influential factors have been isolated, it is impossible to be sure which elements of the programme are having what effect.

The analysis of current affairs programmes in this thesis will in one way be very personal but hopefully be unbiased. Like everybody, one has their own little likes and dislikes. There has been no adequate language developed to classify graphical items therefore it is very hard to describe programme elements in a consistent manner.

Legibility studies have provided clear evidence about the minimum sizes of pictorial components on the television screen in relation to maximum viewing distances. The size of the screen used to display television pictures largely determines viewing distances; these have been established as twelve times the width of the particular screen, so that, for example, the maximum distance possible for pictures viewed on a



24 inch set will be nineteen feet, the dimensions of a twenty four inch screen are 19' 2" x 14' 4". This calculation assumes that the minimum height of individual pictorial elements will be no less than 1/25 of the total picture height of a television screen.

#### POINTS TO BE CONSIDERED WHEN MAKING PROGRAMME ANALYSIS.

When making the analysis of the current affairs graphics the programme in general will have to be taken into consideration. This will be done in order to make sure that the graphics do not violate the mood of the programme. In the titling graphics there should be imagination, good finish and general audio and visual harmony, the same is true for the closing sequence. Naturally legibility is the most important. In the informational graphics (diagrams, maps etc.) there should be good finish, imagination and they should fit into the general studio design.

#### THE GRAPHIC DESIGNER AND SET DESIGNER.

The graphic designer needs always to work in close contact with the designer of the set. Both designers work must be in harmony. A good working relationship should be set up from the beginning. Neither has a right to blame the other if the overall graphic and set design are in conflict. Both have a duty to their profession not to let this happen. When set designer and graphic designer work together in harmony with



each others styles, the resulting designs are usually of superior quality. No matter how diverse the set and graphic designs are, a little discussion and compromising on both sides can produce a good overall effect in the end.



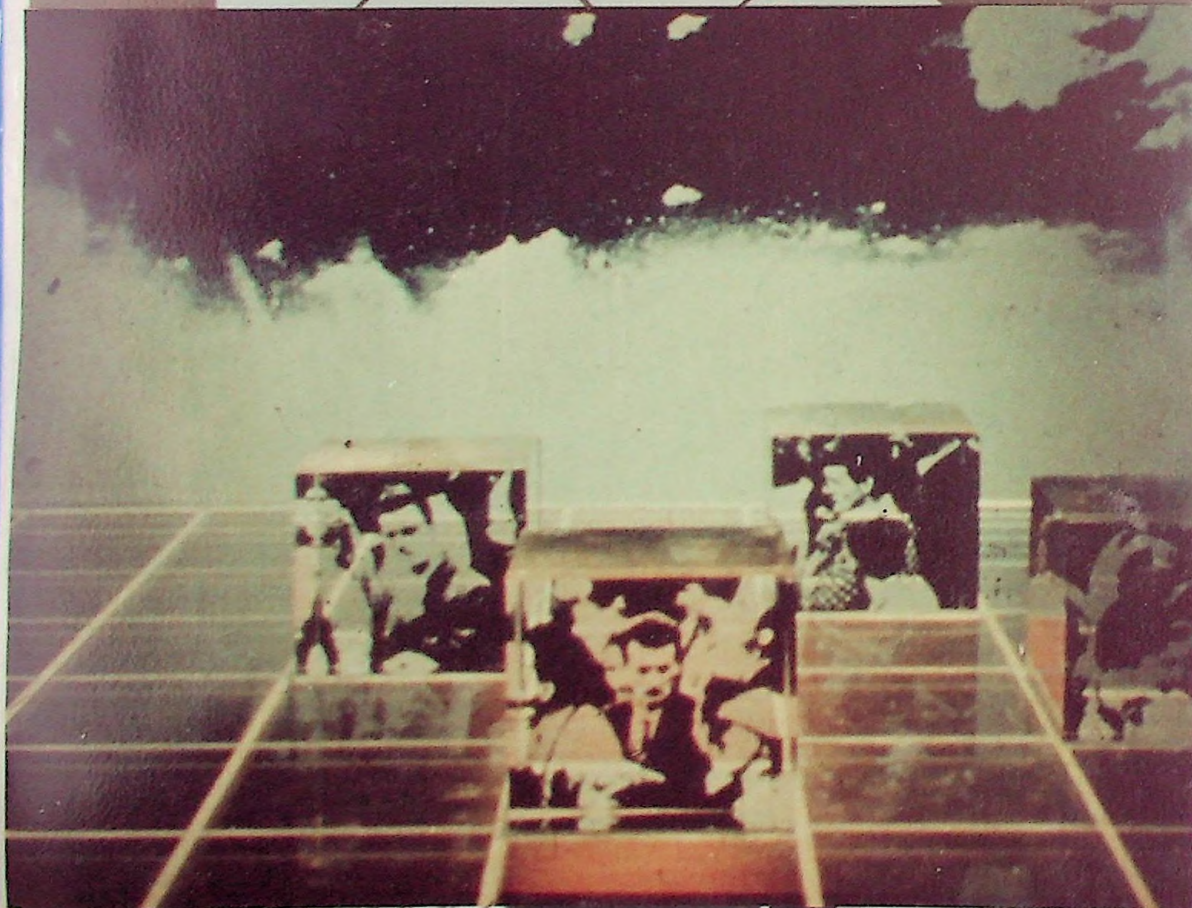
1973-1978

SUNNINGDALE TALKS (NEWS DEC '73 AND AFTER)



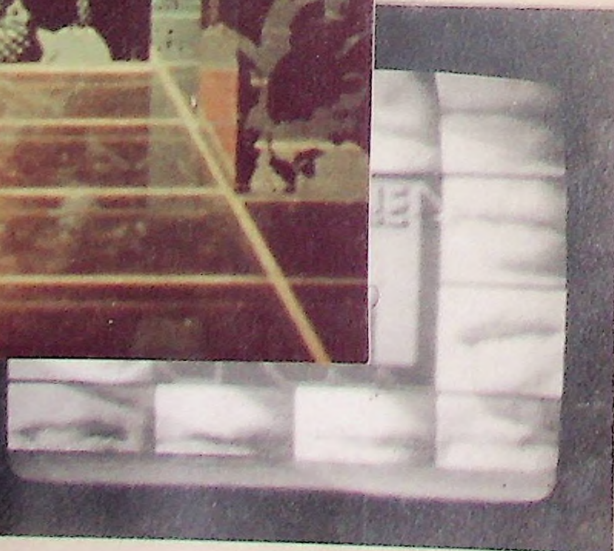
B.P. SLIDE DESIGN "ECHO" (1971)

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BODVICK









## SOCIETY - WHAT IT DEMANDS FROM THE DESIGNER.

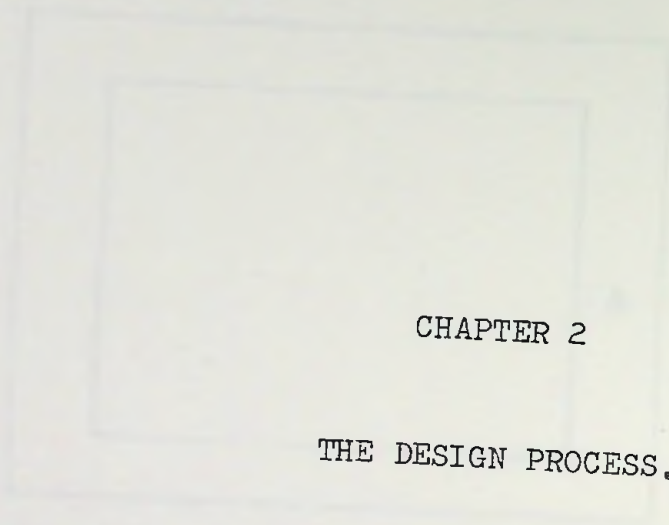
Designers in television must keep up with the rapidly developing technology in their field. Audience tastes and audience expectations are constantly changing and developing. As tastes change expectations grow with listeners and viewers becoming more critical. They demand higher standards, a wider range of programming, new ideas and new formats. To remain the same in a changing world broadcasting must change too. Irish society is in a process of rapid change, horizons are widening and tastes are becoming more sophisticated. If broadcasting is to fulfill its role in, and its obligations to that society, it must keep pace.

Present day graphics are more sophisticated than those in the past. Much past television graphics depended on three dimensional graphics or trick camera movements across lettered titles. To-day's graphics call for considerable technical know how on the part of animation camera operator and the designers ability to use electronic effects. To-day's designer is more a visualist than a draughts person. He must have all the drawing and draughting ability of his predecessors as well as the technical know how to use the equipment of to-day. Much of the television graphics of the past reflected movements in fine art at that time, nowadays they reflect the newest electronic equipment.



Chapter 1 is a brief introduction to the field of  
animation, including the history of the industry.

Chapter 2 is prepared for use as a text and also as a  
reference for those who are interested in the technical  
aspects of animation.



## CHAPTER 2

### THE DESIGN PROCESS.

Compared with other studio assignments, most television  
assignments are characterized by fairly low technical  
requirements. Their emphasis is on displaying the visual  
picture as it leaves the studio with very little editing.  
Television engineers and producers are distinguished by  
the degree to which they are concerned with the technical  
aspects of the picture. The "art" side of the picture is  
usually left to the artist. This is the reason that the  
artist is the most important person in the television  
studio. The artist is the one who is responsible for the  
visual quality of the picture. The artist is the one who  
is responsible for the creative aspect of the picture. The  
artist is the one who is responsible for the artistic  
quality of the picture. The artist is the one who is  
responsible for the creative aspect of the picture.

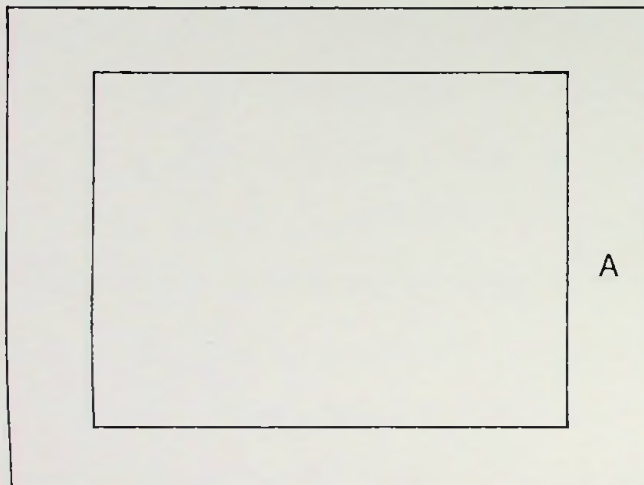
There are many different types of animation. Some are  
done in a traditional way, while others are done in a  
more modern way. The traditional way is to draw the  
characters and the background by hand. The modern way  
is to use a computer to create the animation.



## CUT OFF.

Caption is a term used in television for all forms of artwork, lettering, photographs or diagrams.

Artwork is prepared onto card or paper and must always be in a four to three ratio because of the television screen shape.



A is 'Cut off' area

Compared with other studio equipment, most television receivers are manufactured to fairly low technical specifications. Their capacity for displaying the total picture as it leaves the studio will vary considerably. Television engineers and producers are disinclined to take chances on the complete accuracy of picture reception and therefore allow a 'cut off' area to safeguard against picture loss in transmission. This may mean that as much as 20% of the total picture area is treated as 'out of bounds' for information that is regarded as important.

Where graphic information constitutes a vital part of a programme as in current affairs programmes, a special



safety margin has to be observed. For example on a 12 x 9 in. caption, the actual design area may only be  $8\frac{1}{2} \times 7\frac{1}{4}$  in. The designer always includes the 'cut off' area in his designs but never places important information in it.



## COLOUR AND TONE FOR TELEVISION.

The graphic designer in television must always be conscious of colour and tone. One of the most important aspects of tone in relation to television is that the designer never produces drawings or diagrams on white paper or card. The accepted colour is a light grey or a mid grey. A black line drawing on white card has too much contrast; the white areas impinge on the black line. This situation presents problems for the vision quality engineers, whose job it is to control the electronic picture quality in order to obtain the best possible television image for transmission. The same black line drawing on a grey caption card would have the required tone quality.

## TONE RANGE.

The standard tone range for television is from almost white to almost black. Tones used must not be too close to each other, otherwise there is a danger of their merging into one. This can happen particularly at the black end of the range, so that information can no longer be identified. Subtle drawing in shadow areas may not register on the television receiver. Successive captions must be roughly of the same tone range. A cut or a mix from a very light caption to a dark caption can result in an undesired adjustment of the tone range by electronic means while the caption is on air. The converse is also true.



## COLOUR TO BLACK AND WHITE CONVERSION.

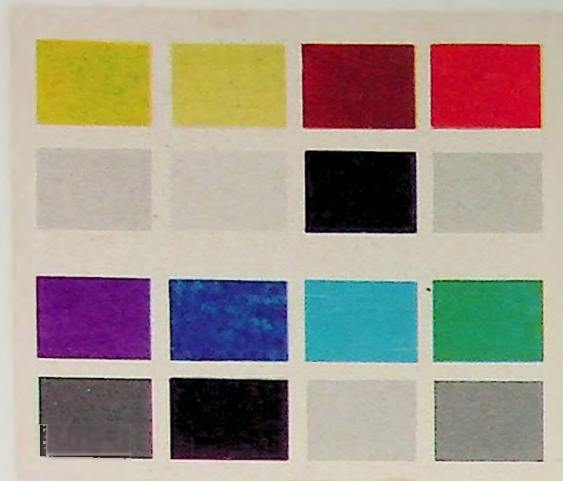
Although colour is now being transmitted by television companies, the majority of viewers are still watching a monochrome screen. For this reason, all colour pictures transmitted must register fully in black and white, otherwise there will be a loss of information. A design may be very good when viewed in colour, but it may not translate into black and white possibly resulting in a loss of information.

The tones reproduced by television are not the same as those seen by the eye. Certain colours appear darker or lighter on monochrome television sets. When producing designs in colour for colour transmission, the designer must use fairly strong colours. Soft subtle pastel colours do not reproduce very well and their black and white equivalents do not have sufficient contrast.

A general rule for colour to black and white conversion is:

<u>Colour</u>	<u>Corresponds to:</u>
Yellow	Light grey.
Orange	Light to mid grey.
Red	Mid grey. (sometimes dark)
Purple	Mid dark grey.
Green	Mid dark grey.
Blue	Dark grey.
Deep blue	Almost black.





Colour to black and white  
conversion

Quick comparison tests by the designer are advisable so that he may be certain of all the monochrome equivalents of the colours he uses in his design.

When a designer is designing captions in colour, often the images are outlined in order to give greater definition when reproduced on monochrome screens.

Colour should not be used in a decorative sense if it is intended for use in colour coding symbols. Distinct symbols should be defined in distinct colours, this should be kept constant throughout. The use of colour increases the potential differentiation between different areas of the screen. Two colours can be very different, but when converted to black and white, they may be the same tone and may not register as separate shapes. Photographs of subjects which are mainly variations of one colour should be avoided. Most colour slide films have good built in contrast and therefore reproduce well in monochrome.

A designer must always remember that colour can set a



mood. Some colours like blue or bright yellow can be cold, others like red or orange can be warm and inviting depending on the tone chosen. Colour should always be used with care as there is nothing as off putting as bad colour combinations.



## STUDIO APPARATUS.

## APPARATUS FOR DISPLAYING LARGE SCALE GRAPHICAL INFORMATION.

Apparatus intended to display large scale graphical information should be integrated into the general scenic design of the studio, particularly if the presenter is to appear in the shot. Pieces of information graphics here and there around a studio look bad and take from both the studio designers and the graphic designers work. Everything in a programme must be in general harmony with each other.

## DISPLAY BOARDS.

Display boards will usually be somewhere between four by three feet or eight by six feet in size and can be constructed to revolve or to incorporate sliding panels. A wide variety of materials are used for the surfaces of display boards - painted plywood, tinfoil to which magnetized cut-outs will adhere or sheet plastic serving as a writing surface. Large displays need uniform illumination. Artwork for large displays is usually drawn up on a small scale and then photographically enlarged. Back projected photographic images can be utilized for coloured graphics of a large area. Lettering on models and large scale graphics will depend on the shots the director wants.





R.T.E. FRONTLINE - EUROPEAN MONETARY FUND PROGRAMME.

This photograph was taken during rehearsals. When the programme was televised all the areas around the maps and presenter were blacked. Note how interesting the pictorial objects are. Red and white are two of the colours used in graphics throughout the series.



There is a limit to the amount of information which can be displayed on a television screen at any one time. Information must be broken down into manageable units and a strictly sequential presentation of graphical material is often inevitable.

#### PROGRAMME PRESENTER IN ASSOCIATION WITH ILLUSTRATIVE MATERIAL.

There is debate among broadcasters as to whether or not the programme presenter is more effective if seen in personal association with his illustrative material. Some producers believe that a presenter should be able to point to diagrams and manipulate pictorial elements in a diagram. Other producers insist that a presenter be separated from his visuals in order that audience's attention can be focused on it without distraction. Sometimes the presenter in association with his illustrative material works very well.

R.T.E.'s 'Frontline' series produced a programme to explain the European Monetary Fund. The graphic department produced large scale maps of Ireland, Great Britain and Europe. These maps were mounted on to plywood and put lying face up on stands in their geographical positions. The presenter was then able to move around and between the models as he relayed information to his audience. He was also able to interchange pictorial objects from one model to the other. The model maps were painted red with white



borders and with careful studio lighting the rest of the area around the models appeared black. This presentation of graphic information worked very well. Often a good presenter appears clumsy in association with informational graphics. Whether or not he should appear in association with illustrative material depends on the producer and the nature of the production. Often people will pay more attention to information if it is presented in a 'school room' atmosphere

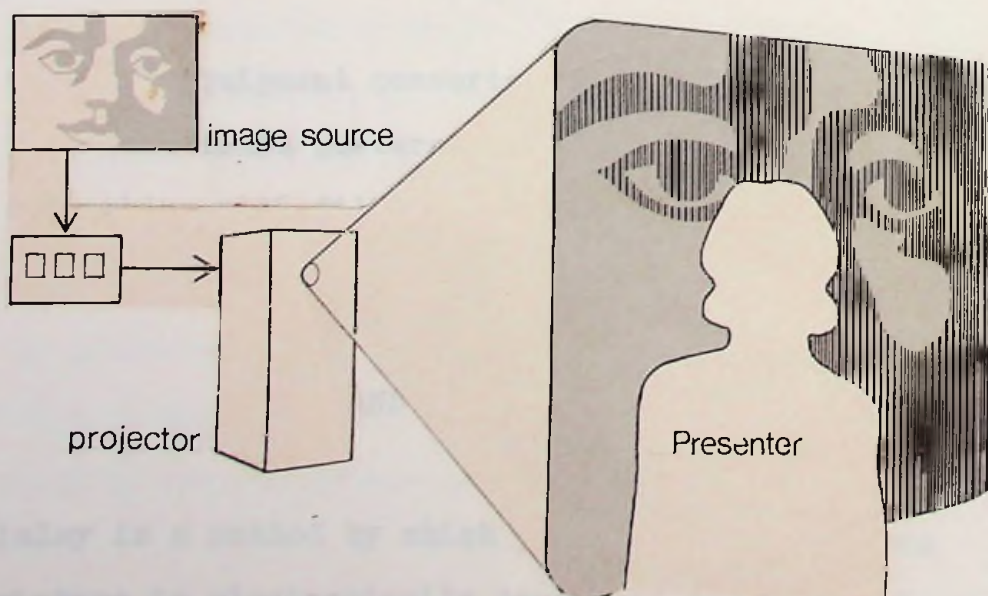


## ELECTRONIC EFFECTS AVAILABLE TO THE DESIGNER.

There are a variety of electronic effects available to the graphic designer in television. These effects can make his graphics more defined and interesting especially where informational graphics are concerned.

## BACK PROJECTION.

Back projected photographic images can be utilized for coloured graphics of a large area. A back projection unit consists of a high powered projector which throws an image of a photographic transparency on a translucent screen. The television camera views the screen from the opposite side and with careful studio lighting a presenter is able to appear in the same area. Many designers are reluctant to make use of projected images because of an inevitable loss in resolution and the difficulty of achieving an even intensity of light on the back projection screen.





## SLIDE SCANNERS.

Slide scanners can also display information which might otherwise have been presented in caption form. A slide scanner is comprised of two 35mm slide projectors and a fairly simple television camera. An optical system enables the camera to view illuminated slides from each projector in turn. The resulting picture signal is passed through the studio vision mixing panel and this enables cuts and dissolves to be achieved.

Slide scanners have their draw backs:

Slides are difficult to modify at short notice.

There is no way of zooming or panning the camera over a slide.

And a designer needs a highly-trained photographic department to back him up.

## TELECINE.

Telecine equipment converts projected cine-film images into television pictures. This opens up the possibility of working with film, a valuable resource, particularly for animated sequences.

## INLAY AND OVERLAY. (CHROMAKEY)

Inlay is a method by which part of one television picture is electronically 'cut out' and filled in by



material from another source. The outline of the cut out area is determined by the particular inlay mask used. Frequently this technique is made to achieve 'split screen' effects. With this split screen effect two different pieces of material may be seen at one time on the screen. For example two moving graphs of population growth can be seen on the screen at one time. Graphics for split screen effects have to be meticulously designed to fit precisely into previously agreed framings lest the information either overlaps or disappears off the screen.

Overlay works on a similar electronic principle to inlay but the foreground subject from one television camera can be inserted into a background picture provided by a second source. It can be from camera, slide or telecine.

In colour television the technique can be extended to use a presenter in the foreground. This is called colour separation overlay (CSO) or chromakey. The foreground subject is placed in front of a highly saturated blue background. This colour activates the keying switch in the overlay device which results in the blue area of the foreground picture being replaced by pictures from a second source. Since CSO draws on 'direct sources' for its backgrounds, it produces higher quality composite scenes than studio back projection.



## REVERSE SCANNING AND REVERSE PHASING.

Reverse scanning is an electronic mode which produces a mirror image of a television picture.

Reverse phasing electronically inverts the tonal scale of a monochrome television picture so that white becomes black and vice versa. Naturally this cannot be used if a presenter is to be used in the shot.

The graphic designer must be able to create special effects' sequences using the equipment mentioned above or combinations of it.



## REQUIREMENTS FOR TELEVISION.

Graphic design, as such, is recommended, in connection with the communication of visual information, and giving either typographic or visual elements or both. In television the visual information must always be legible and to the point. As has already been mentioned, graphic design in television differs mainly from graphics in other fields in that its visualization is purely secondary. Information, therefore, must be emphasized at every stage.

## DESIGN PREPARATION.

### CHAPTER 3

#### DESIGN PREPARATION.

Types used for television purposes, whether they are printed or shown on screen, must always be legible and to the point. As has already been mentioned, graphic design in television differs mainly from graphics in other fields in that its visualization is purely secondary. Information, therefore, must be emphasized at every stage.

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
0123456789

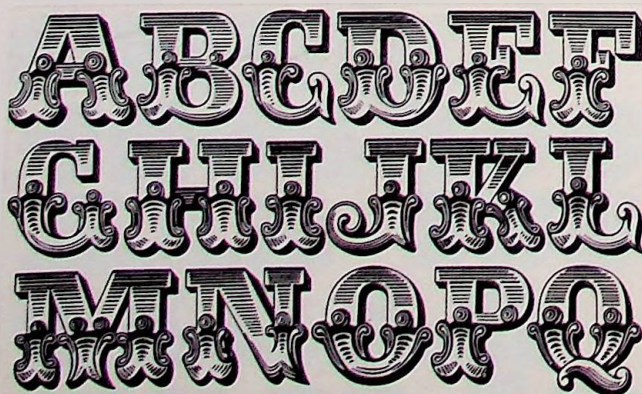


# TYPOGRAPHY FOR TELEVISION.

Graphic design, it must be remembered, is concerned with the communication of visual information, comprising either typographic or visual elements or both. In television the visual information must always be legible and to the point. As has already been mentioned, graphic design in television differs mainly from graphics in other fields in that its manifestation is purely momentary. Information, therefore must be understood at once.

## TYPE NOT TO BE USED ON THE SCREEN.

Type used for titling, labelling purposes, captions and credits must always be legible. Legibility is always the first consideration when choosing lettering, particularly for programme titles. Some styles of lettering are not suitable for television, because there are features of their design which make them unreadable. The letter styles not recommended are the exaggerated modern Roman types, extra-light letters, very condensed letters, very decorative styles, copper-plate scripts and some black letter styles.



Type not to be used



ABCDEFGHIJ (cont.)  
 KLMNOPQRS  
 TUVWXYZab

ABCDEFGHIJKLMN  
 abcdefghijklmnopqrstuvwx

ABCDEFGHIJKLMN  
 abcdefghijklmnopqrstuvwxyz 123456

ABCDEFGHIJKLMN  
 abcdefghijklmnopqrstuvwxyz !:~ abcdefghijklmnopqrs

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ABCDEFGHIJKLMN  
 abcdefghijklmnopqrstuvwxyz 123

F.1.

Television is created by a beam scanning a tube with 405 or 625 lines every  $1/25$  of a second. These lines are called the screen raster. The hairlines and fine serifs of the modern Romans nearly always coincide with the raster and therefore a vital part of the lettering disappears; only the thick strokes would be visible. A similar effect can be observed with very light letters. In most cases the slimness of the strokes in relation to the point size causes illegibility and if the point size is increased to



gain sufficient strength of line, the letters appear too large.

Condensed letters tend to have rather slim strokes, or if their weight is heavier, the inside shapes tend to fill in, particularly in lower case letters. The normal spacing of these letters is too tight for television and if the letters are spaced, the words and titles lose their unity. With most decorated letters, the strokes are heavy and include delicate white line decoration. This generally fills in or shimmers, making the letters look ungainly. Any exaggerated type style should be used only with discrimination and if possible tested before transmission.

**ABCDEFGHIJKLMNO P  
abcdefghijklmno p q r s**

**ABCDEFGHIJKLMNO  
abcdefghijklmno p q r s t**

**ABCDEFGHIJKLMN  
abcdefghijklmno p q r s**

**ABCDEFGHIJKLMNO P  
abcdefghijklmno p q r s t u v**

**ABCDEFGHIJKLMNO  
abcdefghijklmno p q r s**

**ABCDEFGHIJKLMNO P  
abcdefghijklmno p q r s t u v**

**ABCDEFGHIJKLMNO P Q R S T U V W X Y Z & ? ! : ;  
abcdefghijklmno p q r s t u v w x y z 1 2 3 4 5 6 7 8**

**ABCDEFGHIJKLMNO P  
abcdefghijklmno p q r s t u**

**ABCDEFGHIJKLMNO P  
abcdefghijklmno p q r s t u v**

**ABCDEFGHIJKLMN  
OPQRSTUVWXYZ**

**ABCDEFGHIJKLM  
OPQRSTUVWXYZ**

**ABCDEFGHIJKLMNO P Q R S U V  
abcdefghijklmno p q r s t u v w x**

↑

TYPE TO BE USED ON SCREEN.

The choice of type is dictated by the style and content



of the programme, as is the layout. The type must not violate the mood of the programme. The strength of line, character and shape of the sans serif group of letters make them reproduce very well on television. The variations of them that are available make them very appropriate for many categories of programmes. They have sufficient boldness for short titles, as well as finesse when used in mass. The smaller point sizes and lower case letters are very clear, and with discretion they can be blended with other styles.

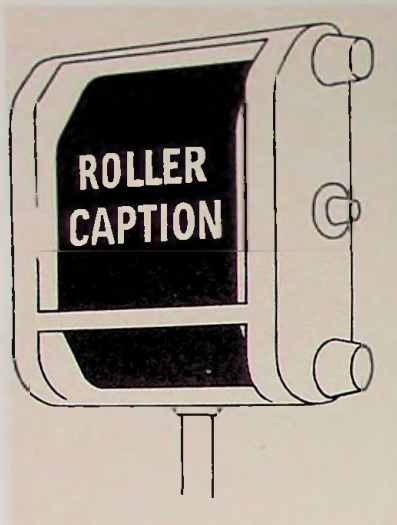
#### SPACING OF LETTERS AND WORDS.

The linear spacing of lettering is very important. The distance between the lines should not be more than the height of the letters being used and not less than a quarter their height. Too little linear spacing makes lettering look cramped. It is essential that all lines of lettering be parallel to each other, as well as parallel to the bottom of the caption. When there is a mixture of type sizes, the linear spacing must be done visually, then measured up to obtain parallel lines. Linear spacing for roller captions must be more variable.

When lines of lettering are static, up to six lines are acceptable on one caption, but on vertical rollers the lines need to be further apart with not more than four lines on the screen at once. A roller caption stand can present a continuously moving graphic and



it is usually used for programme and credits.



The stand is made up of two motorized rollers between which passes a roll of paper bearing drawn or printed lettering. The camera remains stationary, shooting the area between rollers. Thirty six point type are the ideal sizes to be used on the screen.

#### LOWER CASE LETTERS.

Lower case letters are normally used in conjunction with their appropriate capitals. Sometimes titles are produced with only lower case letters. This should be used with discrimination, it is only appropriate for a limited number of programmes and subjects. The real merit of lower-case letters is familiarity - viewers see them in this form in newspapers etc. Also, in educational television, when new words are shown on the screen, it was found that pupils absorb lower-case form more readily.



### SUPERIMPOSITION OF LETTERING.

Superimposition is used to mix an image from one source with a second image from a different origin. For example, this is often used to identify a studio speaker by superimposing his name over his image on the screen.



Lettering for superimposition must be prepared on a black background and for monochrome systems should be in white. When titles are to be superimposed over strongly patterned backgrounds, it is advisable to enhance the legibility of white type by means of a black shadow edge or one side, called a dropped shadow. Coloured titles should be used against a simple dark background.

### POSITION OF LETTERING FOR SUPERIMPOSITION.

Generally the word or line of lettering for this is placed one and a half inches from the bottom of the caption and centered. Sometimes it is necessary to position the lettering to the right or left of centre, in order to avoid an important part of the



image on the screen being blocked. For superimposition forty eight point sans serif letters in upper and lower case give the best results.



#### SPLIT SCREEN EFFECTS.

To make a lettered information caption more interesting, as well as giving some emphasis to specific words, a combined grey and black caption can be used. This gives a split screen effect, the split being either horizontal or vertical according to the subject and information. In some cases symbols are used instead of words. This reduces the number of words on the caption, and makes the information more attractive. With a vertical split screen the frame can be divided in half or one or two thirds, but horizontal split screen should never be more than one third of the height of the screen. This tends otherwise to be very unbalanced.

#### 1966 ELECTION

LABOUR	27,234
LIBERAL	22,001
Lab.Majority	5,233

#### DRUGS: 15-21

	1.1 per 100
	2.3 per 100

#### EMPLOYEES

One year Contracts.  
No wages-if in dispute.  
Increased benefits.

PHOTOS  
FILM  
TELEVISION

DRAWN  
PAINTED  
SCULPTED



### HANDLETTERING.

Handlettering can provide a variety of styles which are more appropriate to the subject of the programme. Handlettering is usually used for sports results and in some news presentations. It can be very suitable for programme titles, particularly for drama, historical documentaries, arts programmes and even some light entertainment.

### ELECTRONIC LETTERING.

Electronic lettering can print on to the screen at high speed and is used for very high speed productions which are live transmissions such as moon landings.

Nowadays directly generated lettering is used for subtitling films and programmes. The type face is fed into a computer and is directly generated onto the screen by means of a computerized typewriter connected to the computer. Sometimes directly generated type is used in programmes for the deaf.



## ANIMATION.

## WHAT IS ANIMATION.

Animation in film imparts the impression of life and movement to static images. The retina of the eye will retain the image of an object for a fraction of a second after the object has disappeared. Film capitalizes on this function by quickly replacing the picture projected from one frame by a series of slightly different pictures on successive frames. If frame changes are made in a shorter period than that of the persistence of vision, a viewer experiences the impression of movement. Film images are recorded at the rate of twenty four frames per second. Each frame is slightly different than the one that went before. In animation, this is achieved by changing or moving pictorial elements in the periods between the exposure of individual frames.

## USES OF ANIMATION.

Techniques of animation are used to demonstrate processes by showing pictorial elements in dynamic interrelation. Diagrammatic movement can be used to highlight changes in size, speed or density; to illustrate direction or flow patterns or to direct the viewers attention to different parts of a diagram.

Animation is not cheap to produce, it can take a long



time to work out the idea and produce the artwork. Most programme opening titles are animated in some way, some are simple and others are complex. If the animation is to be matched precisely with the sound track, the latter will be pre-recorded onto magnetic film sound stock. Using film-editing equipment, the designer can then compute at exactly which picture frames movements must begin and end if they are to synchronize with specific events on the sound track.

#### SIMPLE ANIMATION EFFECTS.

For simple animation effects a film camera with single-frame exposure control is all that is needed. The camera must be capable of presenting a single frame of film stock for exposure in exactly the same registration as previous and simultaneous frames. A basic animation unit should consist of a single frame camera, a stand to hold the camera rigid in different vertical positions, a table on which to position artwork beneath the camera and lights which will provide illumination of the same intensity over long periods of filming. A designer can use this equipment to film many different types of animation: three dimensional objects, cut outs on cel, flat models and he can even draw under the camera itself.

#### GROWING DIAGRAMS.

Lines for graphs or other diagrams can be made 'grow'



without taking up too much of the designers time. This is called scrape back method and is a technique where the diagram is painted on to a cel, positioned on the animation table and filmed with the film travelling in reverse. Selected points of the artwork are successively scraped off the cel between exposures when the film is processed and projected forwards, the artwork appears to grow.

#### ANIMATED CAPTIONS.

Animated captions are made up from several layers of card and are manually operated outside the camera field area. Basically this technique involves the uncovering or concealment of graphical information on the various layers. When a successive series of movable paper panels are pulled away pictorial elements will be revealed through cut-out windows in the higher layers. This type of animation is really only effective in monochrome. The studio engineer can compress the grey scale to two tones, black and white. The more sophisticated this type of animation gets the more fragile it becomes and the harder it becomes to operate. The range of movements are determined by the structure of the card.

#### MAGNETIC DIAGRAMS.

Magnetic diagrams are used where animation is needed to show the accumulation, subtraction or substitution of



pictorial elements and especially where the presenter needs to be seen in the shot explaining the diagram. A background drawing is executed on a surface such as tin-plate to which strips of magnetized rubber will adhere. Movable pieces are usually drawn on to card which has been precut to the correct shape and backed with magnetized rubber. During the programme the presenter will remove or replace cut outs as appropriate to his verbal commentary. This device often appears clumsy and takes lots of rehearsal. It has the advantage of being a simple system to design and is reasonably quick to put together. For more complex animations see F.4. and F.5.

#### INFORMATIONAL GRAPHICS.

##### DIAGRAMS.

The functions of diagrams in a programme are:

To compensate for the limitations of the television image.

To present information in a style which can be easily understood and taken in.

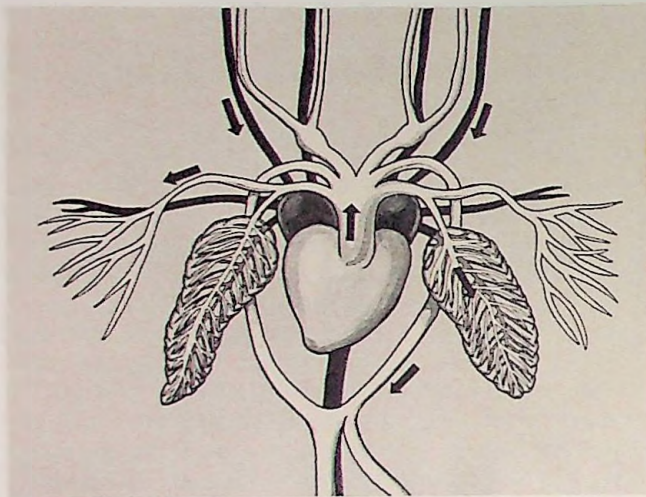
To help produce an integrated whole.

When designing diagrams the designer must be fully conversant with the ideas to be communicated.



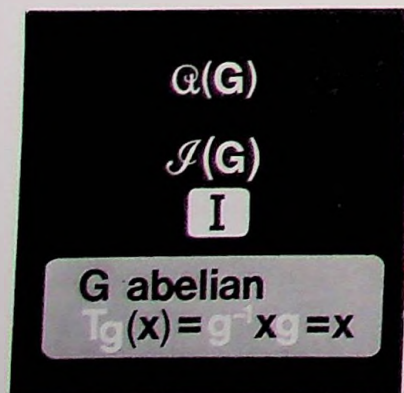
## REPRESENTATIONAL DIAGRAMS.

Representational diagrams demonstrate something about the structure or functioning of a real entity. These diagrams rely on simplification and abstraction though the degree will vary, for example, a series of black dots may represent a congregation.



## NOTATIONAL DIAGRAMS.

Notational diagrams are made up of a series of arbitrary symbols used to stand for completely abstract ideas. This will include mathematical formulae, graphs, statistics etc. Notational diagrams must be legible though representational diagrams can be more artistic





## PHOTOGRAPHY.

Photography for the designer is a valuable supplement to his ranging techniques and creative ability. For programmes such as news, the designer can give only an impression of an incident, whereas the photograph describes it fully. Photography has a distinct advantage over hand drawn captions in that it can integrate smoothly with live action material on film and in the studio. Photographs have the same tone structure as live material. Photographic images can be combined with drawn imagery with effective results both in animation and for captions.

The designer should be a capable photographer or at least have some knowledge of the principles of developing and printing and be able to give clear instructions to a technician. The designer is often required to retouch and manipulate photographic images in a creative manner. This type of retouching is often required for titling and credit sequences and for programme material. When more than one copy of a caption is required then photography is the obvious means of reproduction.



## ARTWORK FOR TELEVISION.

Because the television picture is made up of a series of horizontal lines, there is always a slight loss of definition when the original graphic is compared with the receiver image. Bearing this in mind, the designer must always make his designs bolder, more precise and clearer than normal reproduction standards demand. This will certainly affect the scale of the image in relation to the screen size. The scale must make full use of the twelve by nine inch area but the design must not be too small or too cramped. Always this includes the observance of the rules of cut off.

Artwork produced by the designer must be as near perfection as possible whether it be for captions or titling. It must be clean, flat and be prepared on card. The less layers of cut out used in the finished cut work the better, too many layers of cut out can cause shadows. This is a problem for the lighting technician. The finish on a piece of artwork is usually determined by how close the cameras will go to explore it. Artwork for projected display must be very well finished as blemishes will be magnified on projection.



## THE TELEVISION PROGRAMME.

The graphics required for a programme are usually:

The opening, closing sequence and the credits.  
For informational graphics needed during the  
programme.

There are very few simple draws or photographic  
captions or diagrams to complex plans of international  
action sequences. Sometimes a programme, like a  
children's programme or a sports and news programme  
and even, that the producer may require additional  
introductory sequences to these sections.

## CHAPTER 4

## THE TELEVISION PROGRAMME.

Every programme needs opening, closing and opening  
sequence or part of it. It is usually the credits. Some-  
times the opening sequence is a title or a  
caption which sets up the opening sequence.

## OPENING SEQUENCE.

Every programme needs opening and closing, which means  
is always some form of opening, usually shown in  
some other visual element. This can range from a  
very simple draw or photographic image which is on  
the screen for less or fifteen seconds to a complex  
animated or live action sequence lasting up to two  
minutes. The creation of opening graphics is a  
vital part of the designer's work.



## THE TELEVISION PROGRAMME.

The graphics required for a programme are usually:

The opening, titling sequence and the credits.

Any informational graphics needed during the programme.

These can vary from simple drawn or photographic captions or diagrams to complex pieces of informational animation sequences. Sometimes a programme, like a childrens programme is broken down into different sections. Then the producer may require animated introductory sequences to these sections.

Every programme needs credits, many times the opening sequence or part of it is used with the credits. Sometimes the opening sound track and the credits on a caption roller make up the closing sequence.

## OPENING TITLING SEQUENCE.

Every programme needs titling and credits, whose basis is always some form of lettering, normally added to some other visual statement. This can range from a very simple drawn or photographic image which is on the screen for ten or fifteen seconds to a complex animated or live action sequence lasting up to two minutes. The creation of titling graphics is a vital part of the designers work.





Captions

Title sequences are only an extension of title captions, the major difference being that the design information can be built up over fifteen to sixty seconds rather than appearing all at once on the screen. The sequence introduces the elements of time and movement and integrates sound.

Programme titling can be exciting or infuriating and the dividing line between the two is extremely fine. The designer must always remember that titling is a visual statement informing the viewer about what he is going to see. Clarity and information are much more important than cleverness in design.

#### TITLING AND THE DESIGNER.

According to the type and subject of the programme,



titling sequences give the designer tremendous scope for the development of some creative and exciting imagery. The designer can and always should strive for the best possible designs, whatever the limitations or budget and produce work which is sympathetic to the programme and distinctive in terms of ideas. The designer must be familiar with the programme and discuss the form of interpretation with the producer. He must then devise an explicit brief, obtain all the necessary background information and quickly develop his ideas for the programme. The designer never has much time to think out the solution to a particular problem and it is likely that he is working on several programmes at the same time. He has to make out a work schedule which must be strictly adhered to if the work is to be completed on time for rehearsals and transmission. Whatever the designer produces must usually be right the first time; there often cannot be any second thoughts because the schedule would be broken and the budget exceeded or or deadlines for transmission may not be met.

The range of materials, methods and techniques the designer has at his disposal is very wide. It is sometimes difficult not to be over-enthusiastic and adventurous and produce a sequence which makes the following programme seem flat by comparison. This requires from the designer the undefinable quality of taste, knowledge of what to use with what, so that the sequence truly reflects the aim and level of the



programme.

As with most creative activities, the difficulty is not in the method of production but in the actual design and development of an image or images which are more important than how they are produced. A good designer has a repertoire of approaches which he knows will work and which are compatible with his ideas.

#### GRAPHICS USED IN TITLING.

The public should be able to recognise the programme by its opening title. The use of animation offers many advantages in titling design as it can make use of every graphic style and presentation to illuminate its messages. This can vary from the wholly symbolic approach to the simplest diagrammatic explanation. It also adds an aesthetic factor to purely intellectual content. Animated pieces have proven easier to memorize than live action supplying comparable information.

Most opening titles make use of some form of animation. The availability of electronic effects which can be used in animating have made titling more ambitious and interesting. By combining some of these special effects with perhaps only one piece of artwork, thirty seconds of fascinating movement can be recorded on film.

An opening title needs to stand up to repetition. A



A titling sequence that viewers get bored with can have a very bad effect on the atmosphere of the programme, some viewers may even be prompted to switch to another station. Any type of graphics may be used in titling obviously some are better than others. All artwork for coloured titling must still relate to distinguishable tones on the grey scale to allow for reception by monochrome receivers.

#### SOUND FOR TITLING.

Sound is also important in titling. The television is an audio visual system of communication. The designer of an animated titling sequence must make sure that the visual and the sound track are in harmony and that both compliment each other.

The opening title is the warning of the commencement of a programme, it gives the viewers a few seconds to get settled for the programme. The idea behind the sound track is to leave in the memory of the audience an unescapable residue of sound associated with the programme. This helps to draw attention to the programme when it is on air again. For continuity purposes, the same sound track should be used in the opening and closing sequences. If not at least another part from the original track should be used.



## THE DESIGN PROCESS.

The actual design process does not necessarily have any logical path; some of the initial stages can be very irrational as one thinks around the subject. Any approach to a design problem is valid as long as the designer is sure that he has researched the subject fully, rejected all the cliché references and got below the surface of the subject.

The designer can work out his ideas in his own way as long as he can do it clearly and quickly and explain it to others for example the producer. The choice of the method of production is usually suggested by the producer, but it is often made in general discussion between the designer and producer. Often the designer has to persuade the producer that a particular style and method of titling would be appropriate for his programme.

## INFORMATION GRAPHICS NEEDED DURING PROGRAMME.

The producer of a programme needs to be able to call on his graphic designer to provide him with maps, diagrams, illustrations etc. at very short notice. Although some designers have a reserve of this information always at hand, quite often a current affairs programme needs information that cannot be kept in reserve. This type of information is usually needed in a hurry though a hurried piece of work must be as good as the piece that has been in the pipeline for



weeks.

When a graphic designer takes on the designing of a programme on current affairs, he needs to design a general format for the presentation of the informational graphics. This general format will be used throughout the programmes run. When a general format is designed, the hurried job can be easily disguised. The use of certain colour combinations, map and graph layouts all go to make the work look good and add a general harmony to everything in the programme.

Much of the equipment mentioned earlier is used when producing graphics for use during a programme.

#### CREDITS OF A PROGRAMME.

The closing graphic sequence which is the credits of the programme is also very important. This sequence can last from about thirty seconds to two minutes or more depending on the amount of credits involved. The production team, researchers, presenters and guests are entitled to be credited for contributing to the making of the programme. The credits add the final touch to the programme. Credits can stimulate further interest in the programme's topic. A viewer may want to write to the producer about some topic or other; he can do this directly by finding out his name from the credits. Credits supply information therefore they



must be legible and straightforward. Audience comment about a programme is very important to programme producers and researchers. A simple comment from a viewer can often highlight a programmes fault for the producer. If the designer can give a good opening and closing graphic to a programme, it is amazing how many people think they have seen a good programme in between.



## CURRENT AFFAIRS PROGRAMMES.

### INTRODUCTION.

The television screen has been becoming more and more the focus of public attention. The graphic designer has to design style and ways of displaying clear and understandable information to the public. Words have to be expressed which cannot be communicated by the live image.

Current-affairs programmes have a high information content. They differ from other programmes in that

## CHAPTER 5

## CURRENT AFFAIRS PROGRAMMES.

It is the duty of the graphic designer to help the viewer with the aid of his graphics to understand and assimilate the information of the programme as rapidly as possible. Apart from pictorial graphics, much of the explanation of current-affairs programmes will be achieved through the spoken word which is not the province of the designer. An informational programme like current-affairs is likely to be live action in concept but requiring animated sequences to clarify concepts which cannot be otherwise explained.



## CURRENT AFFAIRS PROGRAMMES.

## INTRODUCTION.

The television screen is fast becoming more and more the focus of public attention. The graphic designer has to design styles and ways of relaying clear and unmistakable information to the public. Moods have to be expressed which cannot be communicated by the live image.

Current affairs programmes have a high information content. They differ from other programmes in that the programme content may not always be decided on until the day of broadcasting. This can cause problems for the graphic designer who may have to supply within hours the diagrams, graphs etc. needed by the producer.

It is the duty of the graphic designer to help the viewer with the aid of his graphics to comprehend and assimilate the information of the programme as rapidly as possible. Apart from pictorial graphics, much of the explanations of current affairs programmes will be achieved through the spoken word which is not the province of the designer. An informational programme like current affairs is likely to be live action in concept but contains animated sequences to clarify concepts which cannot be otherwise explained.



Many current affairs programme openings use live action film. This is expensive but with titling superimposed on it an impression of importance can be achieved at once. The very nature of current affairs programmes is to lay out the facts on current affairs of the time and to give views from certain people about these affairs. Graphics for such programmes need to be well defined, clear and intelligent looking. It is the duty of a national television station like R.T.E. to relay unbiased facts about current affairs to its public through these programmes.

F.2.

These programmes are very important. Many of the titling sequences animate in regular patterns across the screen.

There is a pattern in the design of current affairs programmes, the graphic always sit together very well. They always have the ruler and 'T square touch', they are precision graphics. Their overall colours are usually very easy on the eyes, blues and greens are commonly used, sometimes reds. They are usually simple in concept and easy to memorize by everyone.

#### TO-DAY'S CURRENT AFFAIRS PROGRAMMES.

People tend to think that current affairs programmes are a platform for politicians. Sometimes they are but not in the boring sense with one political



party's representative arguing with anothers. Many viewers get bored by such programmes. To-day's producers put over their programmes on a more interesting manner by using film, animation and diagramatic explanations. They have less emphasis on studio panels sitting around arguing with each other. There is a new quality in the current affairs programme. Much of the studio discussion is now conducted in an ordered debating fashion.

The producer tries to keep his audience well informed throughout discussions. Usually the presenter will lay out the facts at the beginning of a programme before the studio discussion takes place.

A programme that relates facts and opinions to viewers must be kept clear and simple. The titling graphics of such a programme must relate the same. An animated break-up of the programme title in harmony with a good strong sound track is the usual titling sequence.

Some of these programmes use live action film with a superimposed title over it. This is also effective. Animated sequences have proved easier to memorize than live action film carrying comparable information. There is such a wide variety of type styles nowadays that it is easy to pick a good style of lettering for the title. With a little thought and imagination in the animation of the title, one can often come up with a completely new fresh idea for the opening sequence.



The sound track is very important, it can make or break a good visual idea. A weak opening title can have a bad effect on a good programme. Nowadays with avant of multi channel television, people are getting more choosy. A well designed package can often sell a product. The same is true where television is concerned, the graphics are the packaging, the opening title sets the mood for the programme, if it is not strong, then the programme as a whole suffers.

Most current affairs programmes have several producers, this can often make the designing of graphics difficult for the designer as he has to satisfy many bosses.

#### ANALYSIS OF CURRENT AFFAIRS GRAPHICS.

F.3.

#### ANALYSIS OF 'FRONTLINE' AND PM.

'Frontline' and PM are the two main current affairs programmes on R.T.E. 'Frontline' is more politically based than PM which deals mainly with local affairs.

#### 'FRONTLINE'

#### OPENING TITLING GRAPHICS.

The opening graphics are only eight seconds long, this is a short opening by comparison with other programmes. The main reason for this is to get straight into the



FROM THE



programme as quickly as possible. This in itself creates an impression of urgency and importance. The sound track for the opening is demanding and strident, there is no feeling of pomp and ceremony about it, it demands one's attention at once. For an important programme like 'Frontline' this short demanding opening works. Overall an impression of information giving is created.

Two pieces of artwork were required to film the titling sequence. The title 'Frontline' was set in white sans bold on a black caption in capitals.

HELVETICA BOLD  
**ABCDEFGHIJK  
 LMNOPQRSTU  
 VWXYZabcdef  
 ghijklmnopqrst  
 uvwxyz123456**

A lithographical print was then made from this caption. A second piece of print was made with the title 'Frontline' in the upper half of the caption in small sans bold capitals. A bar, the height of the lettering ran horizontally from either side of the lettering to the edge of the screen.

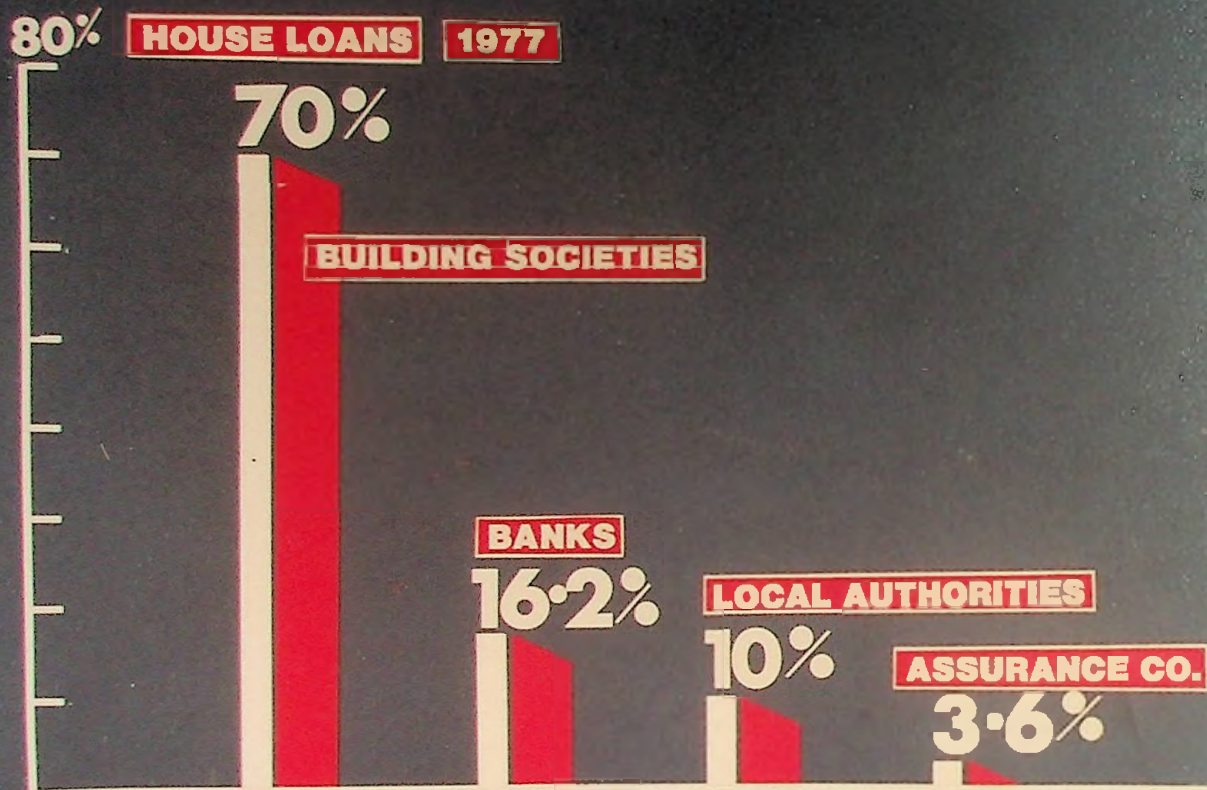


Light blue gel was placed behind the clear lettering of the first print. Then it was placed on the rastrum camera table and back light. The lith print was then filmed by a multi frame process. Each image of the title was brought forward by exposure and filmed. The sound track beats were in perfect synchronization with each new exposure of the title. Much of the animation was pure calculations and expertise on the part of the rastrum camera operator even though the visualization of the finished piece was the work of the designer. Sequences like this are often troublesome as they may have to be re-shot. It is very simple to make a miscalculation of an exposure. This could knock the sound track and the visual out of synchronization with each other.

Yellow, Blue and Red are the three primary colours. Red is always associated with in warmth though the degree varies according to the tone used. Blue is often associated with coldness and yellow with freshness or youth. The secondary colours are associated with combinations of these associations. Blue is a non emotive cool colour. Blue has been a popular colour used by current affairs programmes over the years. The blue used in 'Frontline' is not cold but it gives an air of impartiality to the whole graphic, it is strong, yet not over powering. Blue was also chosen because it blends in with the studio set. This is important because it adds to the integrated whole of the programme.

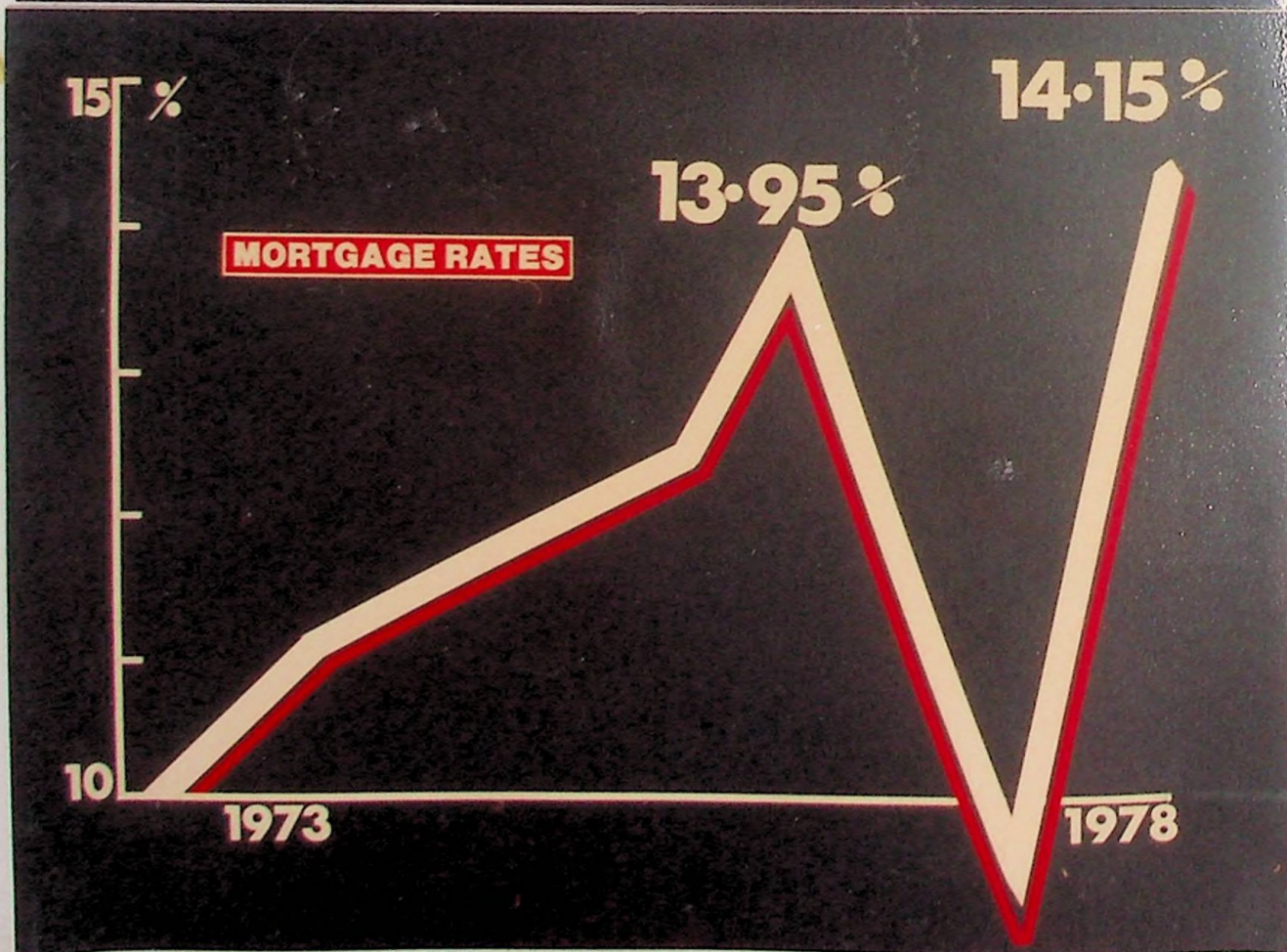


## DIAGRAMS USED IN 'FRONTLINE.'

**RAPE 1977**

<b>Reported</b>	<b>60</b>
<b>Proceedings</b>	<b>44</b>
<b>Convictions</b>	<b>1</b>







# DIAGRAMS USED IN 'FRONTLINE.'

Animation is used mainly for directional pointers and graphs on illustrative material such as maps. These animations are usually achieved by the scrape back method mentioned earlier.

Informational captions are layed out on blue card. Any type required is set out in black and white has bold upper and lower case.

HELVETICA BOLD  
**ABCDEFGHIJK**  
**LMNOPQRSTU**  
**VWXYZabcdef**  
**ghijklmnopqrst**  
**vwxyz123456**

White lines are used on graphs and maps and red is used for important features. Animated captions are rarely used as there is always problems with shadows caused by the layers of card and they are not suitable for colour television. Magnetic diagrams are sometimes used but these take a lot of rehearsing with for the presenter's sake, they are too time consuming for



current affairs programmes. The use of chromakey or colour separation overlay also takes a lot of rehearsal if a presenter is to be in association with the material projected. Univers and univers light type are used for superimpositioning names and titles of programme participants during the programme and also for crediting such people in the credits.

#### CREDITS FOR FRONTLINE.

The closing credits have a slightly different sound track than has the opening sequence. The sound track was played around with and some of the bars were re-edited. The second piece of lith print was used for the closing sequence. The title 'Frontline' with the horizontal bars coming from either side of it is in the top half section of the screen. The credits are placed in the lower left hand part of the screen. Hass bold upper and lower case are used for the credits. Thirty six point hass bold is used for the programme contributors titles and forty eight point hass for their names. This layout reads very well and the whole closing sequence brings the programme together in perfect unity.

#### CONCLUSIONS.

The graphics for 'Frontline' are very straightforward and legible. Everything has a good finish and its easy to watch. The opening title fulfills its role in that it is easily memorized. The sound track and



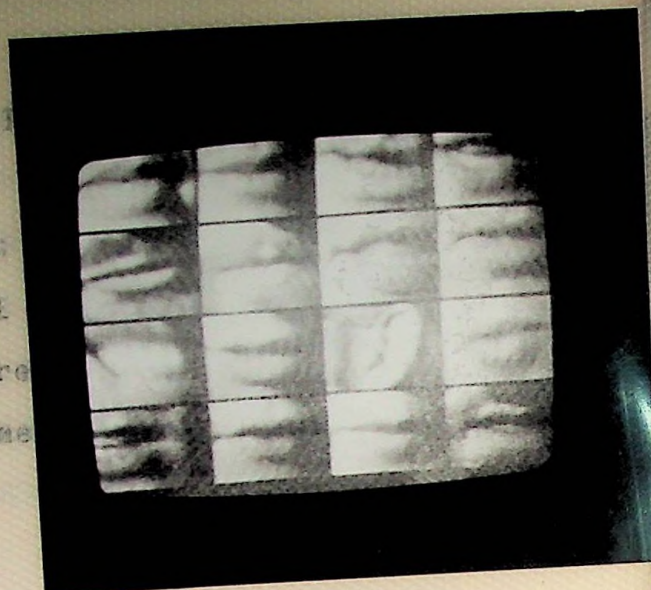
the visual compliment each other, it is impossible to say which is the stronger impact wise. The writer feels that both are of equal importance in this sequence. This particular set of graphics for 'Frontline' have been in operation for about six months. From talking to various people, no-body seems to have become bored by them. The technique of multi exposure has however become popular. Many programmes such as 'Parkinson' use it. Perhaps in time, this technique will become a cliché, for the present it works well for 'Frontline'.

As a designer who has researched many current affairs programmes, it is felt that a short opening is better. Like with an informational or technical book, one likes to get straight to the heart of the information as quickly as possible. 'Frontline's' opening sequence gives the barest amount of information needed to inform what is about to come.

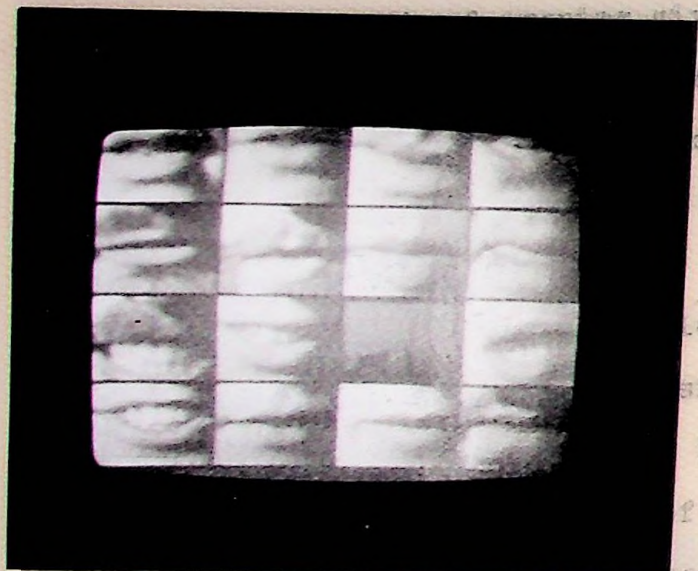
The informational captions used during the programme bear the least possible amount of written information necessary to get a message across to the audience.

On the whole the programme graphics have no major faults, all television graphics have some minor faults mainly caused by the limitations of the medium of television.





The opening sequence is about seventeen seconds long.



frame through each of the r

inside frame of the four rectangles in the center

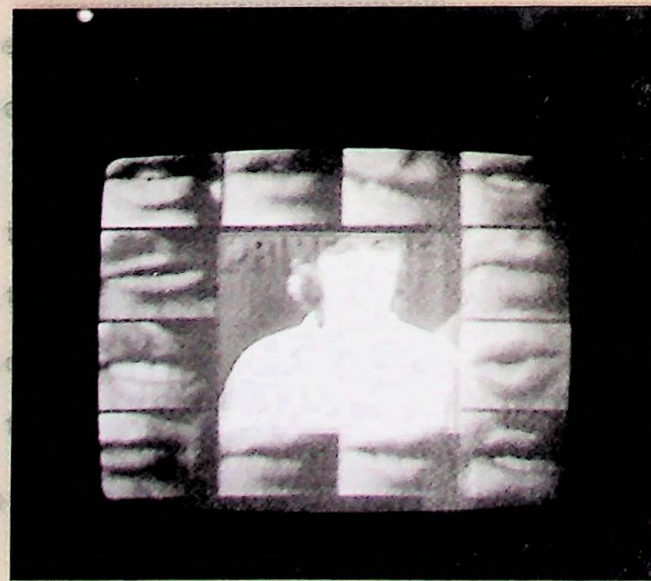
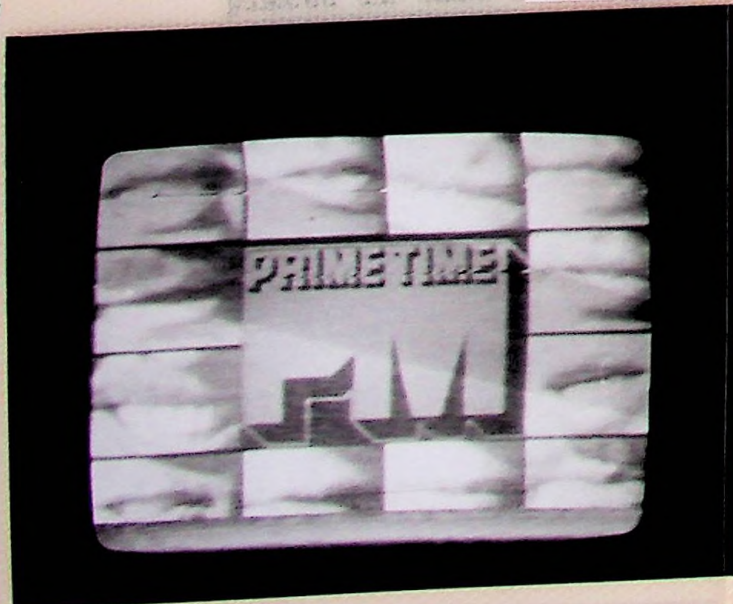
right hand quart

placed in this

PM Opening Sequence

t of an ear was

of live action





## THE GRAPHICS OF PM. PRIMETIME.

PM is more a magazine and chat type programme than 'Frontline.' Affairs of local Irish interest are the main subjects discussed. There is much audience participation in this programme.

## THE OPENING TITLING SEQUENCE.

The opening sequence is about seventeen seconds long. This length of opening gives the audience time to get settled to watch the programme. This was an expensive titling sequence to produce as well as being technically difficult for the rastrum camera man.

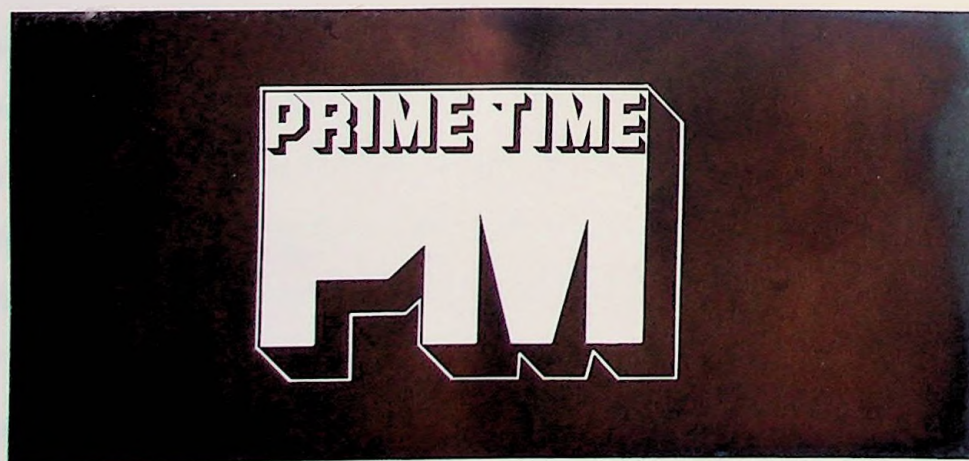
Live action film of people talking was shot. The designer made a grid of sixteen rectangles. The rectangles were bound by black line tape onto a clear cel. Live action film of the mouths was shot in full frame through each of the rectangles except in the inside frame of the four rectangles in the bottom right hand quarter. A full frame shot of an ear was placed in this rectangle. Each piece of live action film had to be filmed separately by back projection through each of the sixteen rectangles.

The sequence starts off with the shot of a mouth, then an ear which moves to where it is positioned in the grid, then the other rectangles containing the mouths appear quickly one by one to take their place in the grid. Then the logo PM Primetime begins to come forward



from the centre four rectangles. Eventually it is alone itself on the screen. This is quite a lively sequence over all. In someways the ear and the mouth have become cliches of such programmes but here the designer has treated them more in the real sense. PM is a talk show, it informs people about what is going on locally and gives views on some of these goings on.

This sequence works better in black and white than in colour. The PM Primetime logo is designed in green to fit in with the studio set. Green is a secondary colour, the writer feels that green is weak . Probably this is a personal feeling, others may think otherwise. A primary colour would have looked better in association with the flesh colouring of the live action film. Perhaps a tone of red may have added an extra bite to the sequence. A light weak green as was used does not compliment flesh tones.



The logo PM. Primetime is well designed. It is clear and well defined and completely legible. This logo is a visual compromise, the television authority wanted



the programme called PM and the producers wanted it called Primetime. The designer compromised by incorporating the two titles into one logo.

#### PROGRAMME ANIMATIONS.

Various simple animations are used in this programme. The styles and techniques used vary. Mainly these animations are used to introduce new books, magazines or topics of local interest. Many different producers work on Primetime. Some prefer other styles of animation to others. This variation of style is good for this type of chat current affairs programme. Audience expectation is always kept at a height. Anticipation by the audience about what is to come often contributes to a programme becoming boring.

#### CLOSING SEQUENCE.

The opening and closing sequences used the same sound track. This is an easy chatty type sound track, it is easy on the ears yet easy to remember. It calls the audience to relax and watch the programme not like 'Frontline' where the music demands attention at once.

The closing sequence fulfills its role in that all information is legible and well layed out. The second set of vertical grids containing the live action mouths from the left is on the screen. The credits are placed to the right of this. Hass light upper and lower case



and has medium upper and lower case are used for the credits.

**ABCDEFGHI  
JKLMNOPQ  
RSTUVWXY  
Z&?!£\$%&'()\***

HELVETICA  
MEDIUM

**abcdefghijkl  
mnopqrstuv  
wxyz12345  
67890;=**

#### CONCLUSIONS.

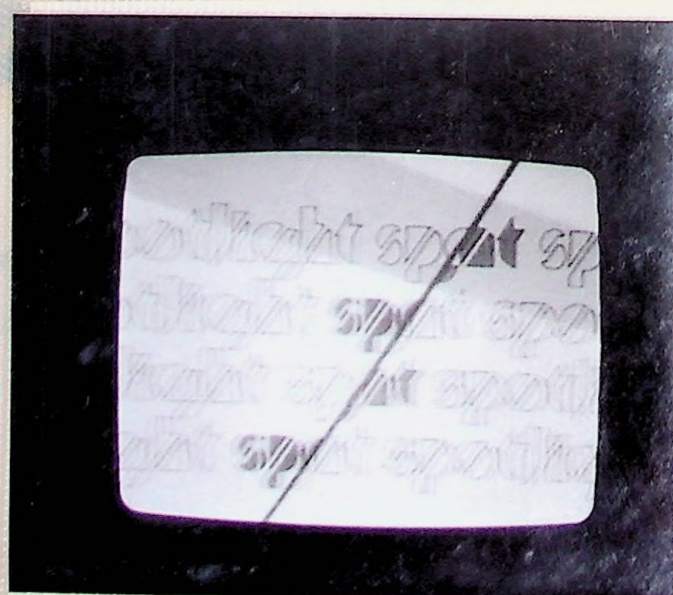
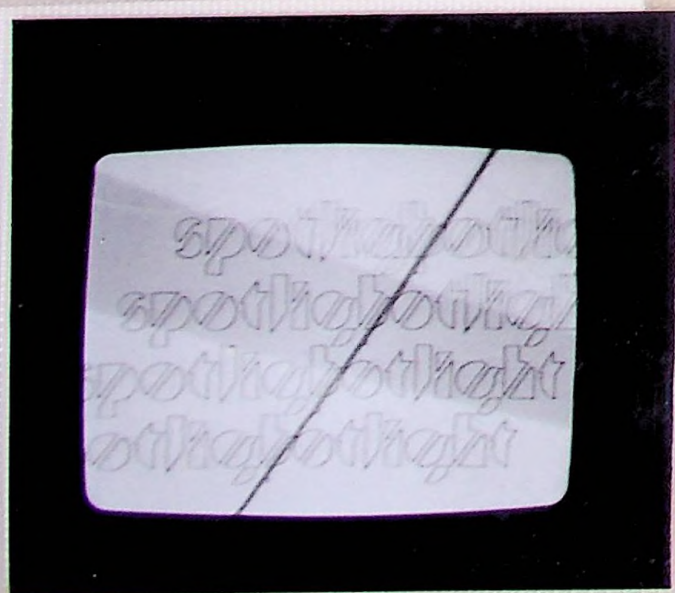
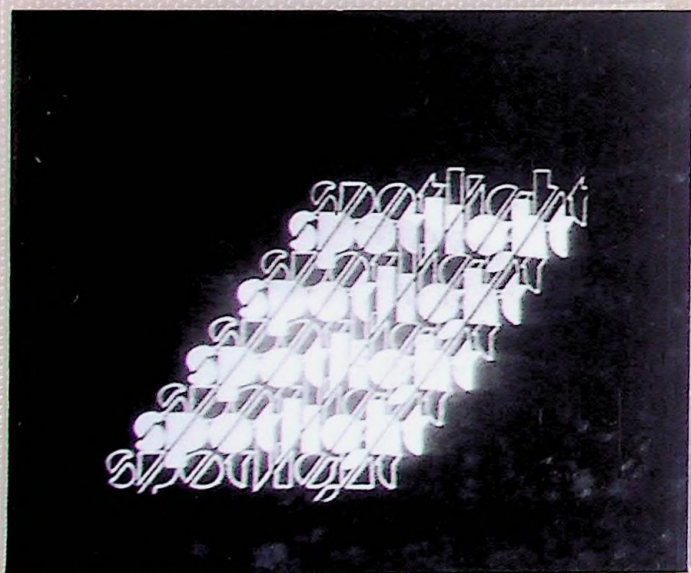
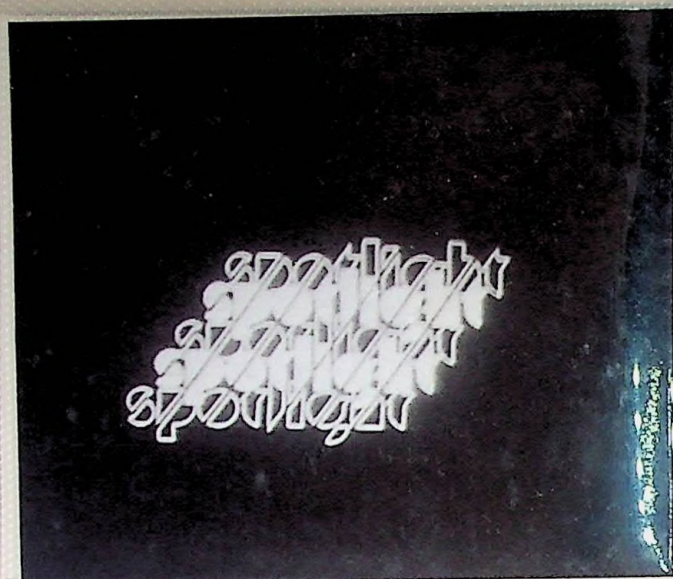
PM. Primetime's graphics work, they don't violate any part of the programme. The colour of the PM logo could be different but then the use of another colour might violate the set design. Too many colours used in the graphics and set design can often give a clumsy overall effect. The graphics promote the mood of relaxation, that is general to the programme. Because of the layout of the live action film, the designer has not resorted to the cliché of the ear and mouth representing communication. There are many ways that graphics for such a programme could be designed. Often such programmes use live action film with a title superimposed e.g. Newsround. There was audience reaction to this titling, this shows that the audience were



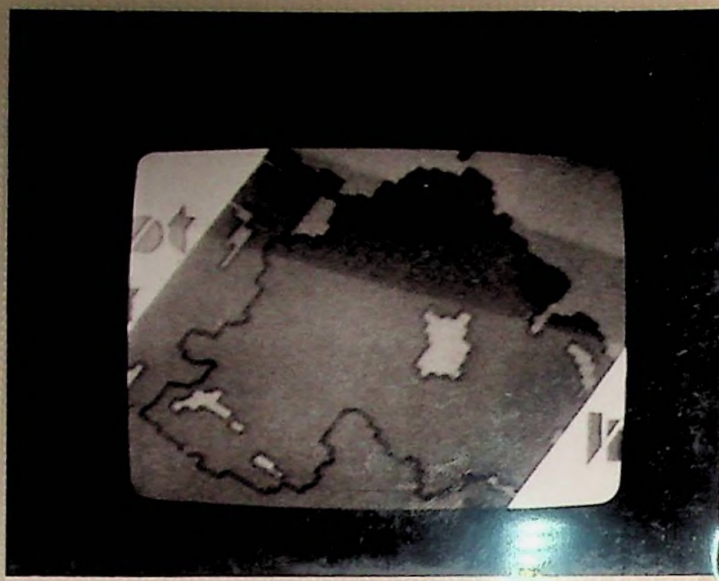
interested in it and took time to understand it.

It is important that the designer gets some audience reaction otherwise how will he know how his graphics are thought of by the public.

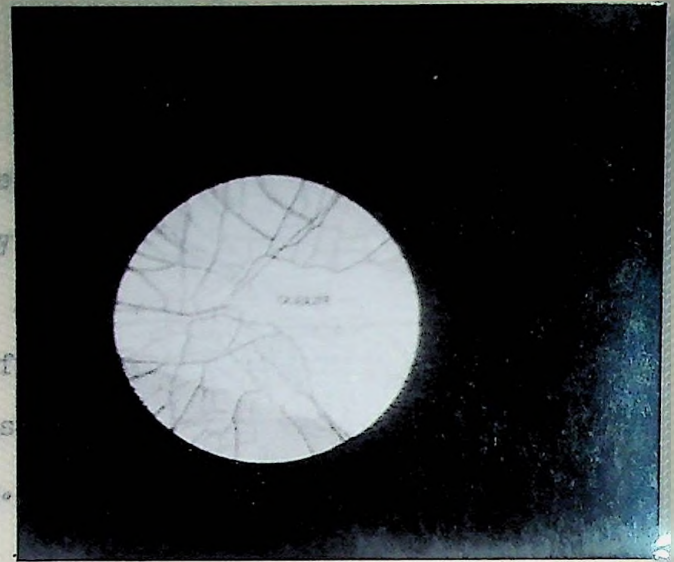
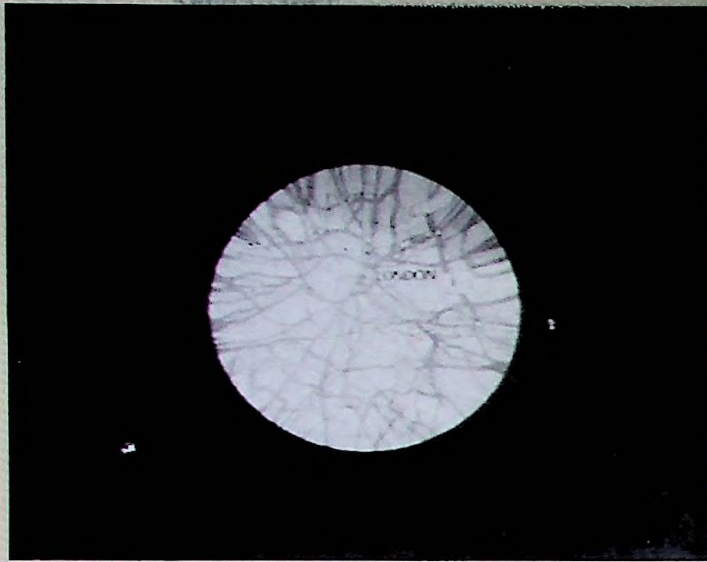












The opening titling sequence takes about twenty five seconds. The lettering style for the title is a combination of the typeface 'Traffic' which is an



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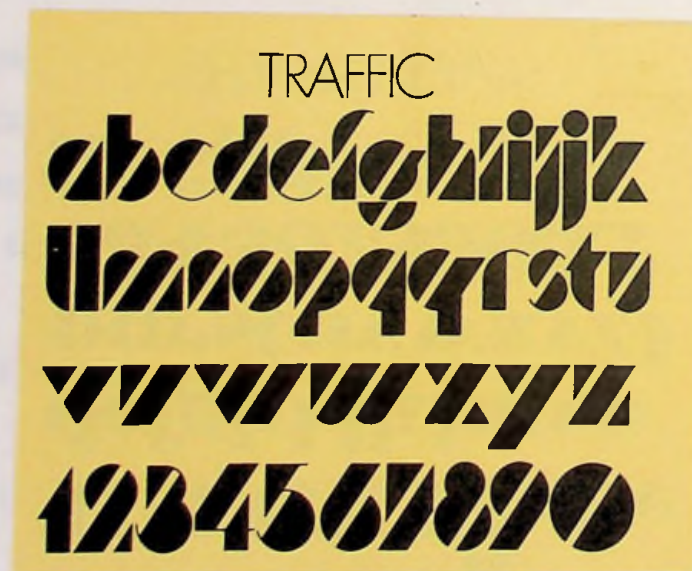
The type face is made up of very angular block letters through which run diagonal lines giving each letter its own rightful features.



## SPOTLIGHT.

Spotlight is a current affairs programme on B.B.C. It is mainly concerned with people's rights and such subjects as medicine. Its very name suggests that it is a programme that points out rights and wrongs to the public. Much live action film is used during the programme and a studio panel is also there to discuss the subjects under observation.

The opening titling sequence takes about twenty five seconds. The lettering style for the title is a derivation of the typeface 'Traffic' which is an abstract lower case face.



The type face is made up of very angular block letters through which run diagonal lines giving each letter its own rightful features.



The sequence starts off with 'Spotlight' in the centre of the screen. From the series of accompanying photographs it can be seen just how much there is in this titling sequence. This sequence is too confusing to describe in words.

Before the titling sequence, there is usually an introduction by the presenter as to what the programme will be about. This is usually accompanied by some live action film.

Any diagrams used in the programme are usually prepared in caption form. They are always legible and not overcrowded with information. The credits are also legible and well layed out.

The sound track for the opening is strong beating piece while the title is multiplying across the screen. Then it changes to a rather more musical beat for the remainder of the sequence .

#### CONCLUSIONS.

The title of the programme 'Spotlight' indicates the idea of uncovering or searching. This is the idea that I think the designer is trying to get across to the public by covering and uncovering his title 'SPOTLIGHT' in rythmitical fashion. The use of block letters as well as just outline shapes also suggests this. For



an important programme such as this, there is too much happening all at once. We live in a fast moving world, the idea of a programme like this is that we should sit down and stop to think about what is going on around us. The graphics have a complete cut half way through to sequences showing maps of various parts of the United Kingdom. This relays a message all right that subjects are confined to these islands but really this is not necessary.

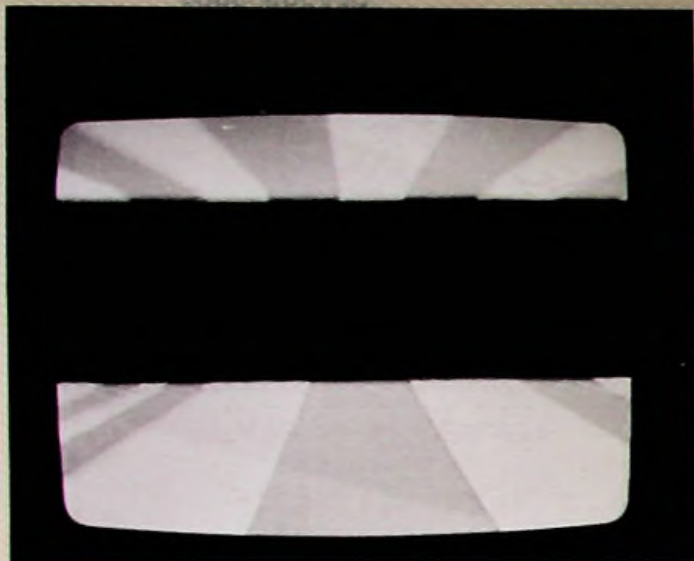
An opening title should not have to give so much information. The use of live action film with a voice over before the titling sequence also adds more information. This title is leaving very little up to the imagination of the viewer. Television has to try and educate people when it can, one way of doing this is to make the audience use their imagination.

The music for the opening sequence is also split, this too adds a little confusion although it is an interesting piece in itself. The graphics are well finished and well layed out - there are just too many of them. There is nearly enough titling sequence for two programmes.

The use of blue confirms what I said earlier that it is popular with current affairs graphics.



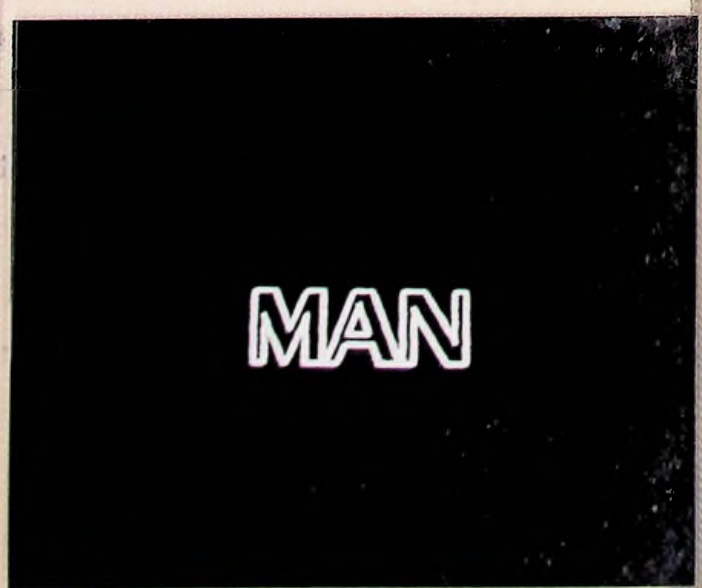
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photographs will explain the sequence. It is  
basically an animated titling type style. There is



are important only when together. When the two words  
are together a red and white line incircle them holding







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DESIGN

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## MAN ALIVE.

Man Alive is another type of current affairs programme. The opening sequence is about fourteen seconds long. The opening music is strong and sets the pace for the computer animated opening titling sequence.

Computer animation is a complex area. One needs to understand it fully before trying to explain. The photographs will explain the sequence. It is basically an animated titling type style. There is a feeling of perspective, a depth about the graphics. The white outline type face used is a derivative from sans outline.

Again blue is one of the colours used in the graphics. The stripes that radiate in perspective from the word 'man' are in light and mid blue. The lines that pull the 'alive' towards the man are in red. The use of red here shows that the two words 'man' and 'alive' are important only when together. When the two words are together a red and white line incircle them holding them together. This gives an impression of strength.

The whole message from this graphic is the coming together to form an entity. Current affairs programmes by their very nature put various facts together to form an unbiased view for the public.



## CONCLUSIONS.

This graphic works very well. It is well layed out and thought out. The design work is well finished. The message that the programme is dealing with current affairs comes across very clearly. The music and the visual compliment each other, the music setting the pace for the visual. A feeling of depth created by the receding lines and shadows. There is a feeling that the audience is being drawn into the programme. This calls for a mood of participation by the audience in the programme as a whole.



## CONCLUSION.

## GENERAL.

The conclusions after each programme analysis should give the reader an insight into the evaluation of T.V. graphics. It is felt that in current affairs programmes the more quickly the audience can get into the programme, the better. The opening graphics need to pull the audience into the programme, this in itself creating the mood of importance.

The actual names of the programmes themselves should give an idea what the programme is about. All that is then needed is for the designer to create a titling sequence in the shortest time possible for him to get his visual message across. The least amount of cuts, mixes or dissolves he uses in this sequence, the better. There needs to be complete continuity between the opening and closing of the titling sequence. 'Spotlight' fails on this point, it is too busy, it has cuts in the sound as well as the visual and over a period of time becomes boring. PM would also become boring because of all the live action film used. This particular sequence is saved by audience curiosity. So much is going on that each time they see the sequence they want to examine it further.

Frontline is the sequence that works best because of



its punch and shortness. The audience is right into the programme before they have a chance to change their mind. This is good for such a programme because it should be of interest to everyone. Man Alive's sequence also works well, its visual impact is strong, it works like a spider drawing a fly into its web.

Rarely does a closing crediting sequence fail. If the same music can be used and perhaps some of the opening graphics in this sequence, then the programme opening and closing together add a dimension of unity to the programme as a whole. This dimension of unity is very important in all programmes. The layout of credits must be well defined or else legibility may suffer.

Current affairs graphics are very interesting, it is the main area where experimentation into graphics takes place. The graphics are mainly progressive and futuristic because of the fact that current affairs are always new.



## GLOSSARY.

- Cel:** Transparent plastic sheets on which images are drawn for film animation.
- Film editing equipment:** The designer can use this to compute at exactly which picture frames certain movements must begin and end to synchronize with the sound track.
- Mix or dissolve:** A gradual merging of one image into another, till the first image has disappeared and only the second remains.
- Multi-exposure sequence:** Precise registration mechanisms in a camera permit such sequences. Elements of a diagram are exposed on the film's first passage through the camera; then the film is wound back (with shutter closed) to the start position so that additional elements can be exposed.
- Roller caption:** A caption which is 12 in. wide and several feet long, normally used for lettering of credits. The roll is placed in a machine so that the



lettering moves either up the screen or from right to left across the screen.

Vision  
mixing: When more than one camera is in simultaneous use, the producer can select the particular shot he requires by means of a vision mixing mechanism.

Lithographical  
print: This is a print on cel made from a black and white piece of artwork. The white areas appear transparent on the print and the black areas remain a solid black. Lithograph prints have the advantage of being able to be back light in animation thus the white areas appear more luminous than if they were on card and front light.



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To the Thames and Hudson Manual of television graphics  
for diagrams used in the Design Process and Design  
Preparation chapters.



## FOOT NOTES.

- F.I. A television picture is made up of fine horizontal lines. According to the system in use, which varies from country to country, there may be 405, 525, 625 or 819 lines per picture. Other things being equal, the more lines, the better the picture resolution. (i.e. ability to produce detail.)
- F.2. BROADCASTING AUTHORITY ACT, 1960 (NO 10)
- "18 - (1) It shall be the duty of the authority to secure that, when it broadcasts any information, news or feature which relates to matters of public controversy or is the subject of current public debate, the information news or feature is presented objectively and impartially and without any impression of the authority's own views."
- F.3. Most of the photographs used in the analysis have been taken directly from the monitor. Such photographs are not the best for quality because the television picture is made up of lines and also the reception is not always perfect.



F.4.

## VIDEO ANIMATION.

Video-animation takes place when a television camera is used in the same way as an animation camera. Scenes can be recorded where new pictorial elements are successively introduced producing the impression of movement. Video-animation has the facility of instant playback via a video tape recording machine. Modification and erasing of unsatisfactory shots can take place during the recording. The quality of picture of video-animation is much better than artwork recorded through a photographic process, for example, cine-film. This is because video-animations are achieved by a direct camera source. Video-animation depends on the ability to edit video tape electronically.

F.5.

## COMPLEX ANIMATION.

Complex animation with different backgrounds and elements animating in different ways at the same time has to be prepared on cels. Great care has to be taken with type of artwork since each cel has to be in perfect regristration. This type of animation is very time consuming and it is not used very often in current affairs programmes. Complex animations are often designed for the opening titles of programmes as there is usually time to think them out beforehand.