

CORPORATE IDENTITY
IN BROADCAST TELEVISION GRAPHICS

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**A THESIS SUBMITTED TO THE FACULTY OF THE
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*"And what is the use of a book", thought Alice,
"without pictures and conversation?"*

from Lewis Carroll's

Alice in Wonderland

History of Broadcast Television

During the 1920s Vladimir K. Zworykin, a Russian-American scientist, developed a television electronic scanning device or iconoscope, the first practical "pickup" tube for television. He also directed the research that led to the development of the "kinescope" and was instrumental in perfecting the "electron microscope", one of the most powerful tools of medical and biological research. [01]

Television, is the electronic transmission of moving images with accompanying sound, sent -usually in color- from a central source or sources to home television screens. From the 1950s, when television viewing first became common in the United States, until the mid-1970s the technology available to the television audience was relatively simple and consisted essentially of a TV set. The last decades, however, have seen an explosion of new devices for home entertainment, all of them outgrowths of basic television technology. The entire field, including television itself, is now referred to as video, a word that includes in its meaning almost all the systems devoted to electronically created images. Teletext and videotext are systems that provide data-bank information

to the television viewer in an interactive format. Video camera and video recording describe the methods used to record images and sound electronically.^[03]

Omnipresence and Television

"In philosophy and theology, divine immanence refers to the "omnipresence" of God in the universe. The theory in its extreme form is pantheism, in which God and the world are virtually identical. Proponents of monotheism, however, have tempered the concept of immanence by positing the parallel doctrine of divine transcendence. Thus, in Judaism and Christianity, God is considered "omnipresent" and active in human affairs as creator, sustainer, judge, and redeemer, but is also considered elevated above and distinguished from the universe."

In my humble opinion, broadcast television gets its power from its omnipresence. The average person watches television more than 25 hours a week -much longer than the time dedicated to worship! Moreover, all the qualities attributed to omnipresence, such as being "active in human affairs as creator, sustainer, judge, and redeemer" are practically applicable to the power of television, as far as its social, political, financial and psychological influences are concerned. Therefore television is "elevated above and distinguished from" all other media.

Naturally, corporate identity and consistency in visuals have become the "iconography" of this new god and religion. The power to reach billions of people with one's graphic works through the medium of television is more powerful than of all the other printed and digitally distributed media put together. The incredible qualitative and quantitative communication power of this medium attracted me to focus on this subjects for my thesis project.

"Any sufficiently advanced technology is indistinguishable from magic."

Arthur C. Clarke

Technical Standards and Systems

The Pixel

The retina of the eye has an estimated 6-7 million light-sensitive receptors, which can simultaneously transfer a color image to the brain over a nerve bundle with approximately one million fibers. No practical color TV system can transfer that much information instantaneously from camera to TV screen. Instead, television depends on the methodical sequential scanning of a color image, in order to relay it over a single channel from the source to its final destinations. To do so, the original image must be broken down into picture elements called pixels. A pixel is the smallest area of a TV image that can be reproduced by an electrical signal.^[06]

Scanlines

For the television system to transmit properly, an exploring spot scans progressively across each picture element from the top left to the bottom right corner of the image. In scanning, the image is broken down into a series of horizontal lines. (In the United States, 525 lines is the standard, it is called the NTSC system.) In a process called interlaced scanning, the scanner "reads" every even line on one scan, producing one "field." The second scan reads the odd-numbered lines left empty during the first scan, producing the second field. The process is repeated continuously, producing 30 frames, or complete scenes, per second. The continuous video signal generated by this action is interspersed by synchronizing pulses, and is relayed via a communications system to the home receiver. There, a reproducing spot, scanning the picture tube in synchronism with the scanning element in the studio, recreates the image.

The smaller the picture elements that the system can handle, the sharper the reproduced image will look. Improved cameras, using more picture elements, create color television images rivaling the quality of 35-mm film.^[05]

The next generation of television could involve a new system called "progressive scanning." Instead of scanning every other line in each frame and interlacing the images to form a complete picture, progressive scanning scans each line sequentially. The system is more compatible with computers and eliminates some of the artifacts of the older systems, such as wheels appearing to spin backwards.^[05]

Resolution and Image Quality

In existing TV broadcasting systems, the picture elements are defined by the system parameters, such as line structure and channel bandwidth. High definition television (HDTV), the most advanced TV transmission system, uses line structures ranging above 1,000 and bandwidths up to 30 MHz for satellite distribution, producing sharper resolution. Systems that compress HDTV signals into 6 MHz or less for terrestrial broadcast distribution are in development.^[06]

Commercial broadcasts of HDTV will begin when the industry and the Federal Communications Commission (FCC) agree on a format. The system would have at least 1,050 lines of resolution, be able to handle multiple transmission formats, and have enough excess bandwidth to carry multiple audio stereo channels plus a variety of other data services. Experts believe that there is enough bandwidth available in the United States to allow every current TV station to get a second HDTV channel while continuing to broadcast in the NTSC standard during the transition period. The Federal Communications Commission envisions completing the transition to HDTV by the year 2008, at which time all NTSC broadcasts would end.^[06]

Computers, Graphic Artists and Television

The development of computer graphics systems, permitting graphic artists to create images directly in the television medium, has greatly influenced daily programming. Electronic "paint systems" use a palette on which the artist renders the image with a stylus or light pen while watching a color television monitor to see the actual image being produced. The color monitor will also show the artist a wide selection of colors, a variety of print fonts, and various shapes such as circles, squares, and triangles.[02]

External images can also be entered through a video camera and digitized, so that they may be altered in size, position, or coloration. The more-advanced computer graphics systems will also permit animation of the images to form a moving sequence.[02]

The TV station identification, the logos, commercial spots, and news inserts are usually created on computer graphics systems. The graphics can also be combined with live images. Major sporting events such as the Olympics or the Super Bowl will have computer graphic artists who create event-oriented graphics that are inserted into the show for "color".[02]

Computer graphics systems have steadily come down in size and price. These smaller systems are capable of three-dimensional rendering of television images and can be programmed to create animated segments for assembly on a videotape recorder.[02]

The Virtual Studio

Graphics technology has advanced so rapidly that virtually anything can be made to look real, even if it is totally computer generated. One of the most promising uses of this capability is the virtual studio. Virtual studios allow announcers to be placed in front of a totally computer-generated background without the annoying halo of luminescence and the lack of flexibility in positioning both talent and cameras. In a virtual studio,

announcers are placed in a plain blue studio, with sophisticated computer workstations generating the environment that the viewer sees, making it possible, for example, for the announcer to appear to be on top of Mount Fuji or traveling through space. In addition to freeing program producers creatively, technologies such as virtual studios can eliminate much of the cost of building expensive sets.^[04]

Computerized Animation

The commercials and cartoons that are being produced today for television broadcasting are often made on computer graphics systems with extended capabilities. While the individual images may be created by a system similar to the computer graphics system just described, the animation is dependent on larger computers with more memory and more capabilities. The key to generating the animation is to create a start "key frame" and an end "key frame." By telling the computer the rate at which the beginning and end images should progress, the computer will do all of the calculations, and produce the intermediate images to go smoothly from start to finish. Short animated sequences of this nature (up to 30 sec) can be stored on digital discs, from which they are transferred to tape and sequenced with preceding and following segments.^[04]

Video Special Effects

To achieve a high visual impact during a television show, it is necessary to manipulate images in a way that will make them appear more interesting. Because video signals can be digitized and put into a frame buffer (a color-information storage device) in pixel form, it is also possible to read out these pixels in a nonlinear form. The original image may have been rectangular, but with the proper software it can be read out as a trapezoid, circle, or some other shape. Similarly, the image may be zoomed, tumbled, overlaid with other images, or made to disappear into the horizon. These effects can be done in real time by a "joystick" and a series of function keys that select the type of effect desired. In many cases these digital video effects are recorded, and the tape is used over and over for opening a new show or for creating a promotional insert.

It is also possible to use these effects during live programming to enhance the appearance of the home viewers' image.^[08]

Interactive Television

The arrival of digital compression and two-way transmission networks such as cable created the opportunity for the next generation of television, interactive TV. In its simplest form, interactive TV allows the viewer to send signals back to the TV transmitter -choosing, for example, which camera angle to watch on a sports program, or playing along with a TV game show. As the technology matures, viewers may be able to influence the outcome of a movie, for example, in such a way that the film appears individually tailored.^[11]

A New and Unique Branch of Graphic Art

The need to incorporate lettering, symbols, photographs, illustrations and moving images on the television screen has created a unique branch of graphic art. Providing captions and titles was a basic requirement in the new television medium and from the very beginning all the methods known to the older branches of the Graphic Arts -drawing, hand-lettering, printing, photography and systems of the early cinema- were used to originate words, and graphic images on the television screen.^[12]

"After many years of discovering and combining ways of presenting visual material for video, the process can clearly be seen to be a vital and integral part of television transmission. Graphic Design can extend the range and express ideas and information in forms which cannot be achieved by any other method" concludes Douglas Merritt, in his book titled *Television Graphics : From Pencil to Pixel* (1987) ^[07].

'Graphic' firstly implies drawing, painting and writing, but a secondary definition is 'vividly descriptive' helps to show the purpose of applying time, skill and energy to the whole process.

Illuminating the author's, or the producer's intention, is the main purpose and justification for any form of graphic design. In order to follow this aim, the television graphic designer becomes part of the long tradition of designers, calligraphers, book-illustrators, engravers, lithographers, typographers and print-designers.^[09]

"A graphic designer can only aid communicators to translate ideas from one person to another, using images and sound in an effective manner. To achieve this they need many, if not all of the skills of the earlier design applications; an ability to draw, as well as the imagination to create and combine all kinds of images; knowledge and sympathy for the logic and history of lettering and typography".^[07]

The Range of Work

Most television stations employ graphic designers with the sole task of designing on-screen promotions. Once graphic designers are allocated to a program they work with the program director as their "client". From then on, he or she will be responsible for all aspects of graphic work for that program or series. This covers the opening title sequence, the credits, all program content which could be anything from a single-line illustration to many minutes of complex animation. The graphic props within plays, variety shows and quiz programs are also designed and produced by the graphic designer. These range from visiting cards, newspapers, posters and menus to large banners for location filming or video recording.^[12]

Working with the Director

The relationship between the director or producer and the graphic designer is vital to the process of creating any worthwhile result. This formal relationship is easily understood and in an environment where there are a large number of specialists controlled by the director in a highly organized and very disciplined way, their interaction is usually straightforward.^[12]

The program director heads an army of people, including scriptwriters, actors, set designers, lighting directors, sound engineers, studio staff, location managers, cameramen, film editors and videotape editors, property buyers and many more. With these number of tasks, to manage the time available to become deeply involved in every level of production, becomes limited. The amount of care and interest invested in graphic presentation differs from director to director. To some, it is an optional extra, to others the graphic work is vital and the binding element which can help encapsulate the whole spirit and direction of the whole production. However, as in any other human activity the "best laid plans" do not always survive, and expectedly good teams produce mediocre results, while forced and sometimes unhappy teams produce works which lasts in the memory for many years.^[12]

Personal Style

It is not easy to establish an individual style in television graphics. The fixed format of the 3:4 ratio of the television screen, the tightly controlled production system in technical operations and editing, and the necessary large-scale teamwork involving many different skills, all tend towards conformity. Television also imposes the time factor that everything must be absorbed in seconds. There can be few poses and no going back. A reader can move at his own pace and wait as long as he chooses before accepting the graphic message and progressing.^[10]

The Five Main Areas of Graphic Design in Television

Although categories are never as tidy in practice as they are in theory, the five main areas of graphic design in television graphics can be outlined as follows :

1. The design and production of graphic material for TITLES and END CREDITS.
2. The design and production of graphic material for PROGRAM CONTENT. This covers stills, illustrations, captions, animated sequences and special effects.

3. ON-SCREEN PROMOTIONAL MATERIAL for the television material for the television station or network.
4. The design and presentation of the STATION or NETWORK IDENTITY.
5. The design and presentation of all GRAPHIC "PROPS" for studio and location sets.

Most graphic design staff will work on this complete range during their career. The extent to which they may specialize will depend on their personal interest and skills, as well as the way the company they work for, manages the graphic design resources.^[07]

My Thesis Project : News Cafe

News Cafe is a fictitious television news program. It deals with music news only. The program is made up of four sections. These sections are Rhythm & Blues, Rock 'n' Roll, Hip Hop and Alternative. I have designed the broadcast graphics for News Cafe under the following sections : Titles, Full-screens, Over-the-shoulder graphics (freezes) and Credits.

My main purpose in creating total design package was because the lack of unity, consistency and identity in today's music television broadcast graphics. The music programs on television today lack the necessary factors that make up a successful corporate identity : Formal Titles, Full-screens, Over-the-shoulder graphics ("freezes") and Credits.

Beginning at the lowest level to create a visual "mood", I began choosing my color palette to include a special arrangement of deep blues, purples, oranges and greens. I used spotlight beam and certain smoke effects to create the atmosphere of a night club and/or a concert hall where these types of music are performed.

Once such an atmosphere was accomplished, I began to form the four distinct categories of the program's graphics identity. I based all the designs for the following sections on my personal observations of the cultures that identify themselves with these styles of music. As a foreigner in the US, it was a most interesting and intuitive experience studying these cultures and their music. Both my conscious and unconscious minds were involved in the design process.

1. Rhythm & Blues : This section consists of four plates : "Top Ten" full-screen, "Mariah Carey" freeze, "Puff Daddy" freeze and the "Salt 'n' Pepa" freeze. Tones of purple were used for this section, in order to reflect the emotional intensity embodied in this style of music. The logo, which is basically a reflection within itself, is symbolic of the reflections

off of a grand piano's lid, a saxophone's surface or maybe a singer's dress.

2. Rock 'n' Roll : This section consists of four plates : "Top Ten" full-screen, "R.E.M." freeze, "Sheryl Crow" freeze and the "Rolling Stones" freeze. Tones of blue and shades of gray were used for this section. The placement and curvature of the lettering in the Rock 'n' Roll logo were inspired by the shapes of musical instruments such as the drum-set and the electronic-guitar. The presence of the outline and faint repetitions of the main logo are based on the actual structure of Rock music. The elements that support the main theme are always present along with, but hidden behind, the main theme.

3. Hip Hop : This section consists of four plates : "Top Ten" full-screen, "L.L. Cool J." freeze, "L'il Kim" freeze and the "Coolio" freeze. Green was chosen as the main color for this section to represent the recent sub-culture that grew along the lines of this rather unusual and rebellious music style. The performers, listeners and followers of this music choose to wear fluorescent colors in their clothing and belongings. I therefore used these tones as my primary color elements while designing the identity. The reflectivity of these real life elements show through in the logo of this section.

4. Alternative : This section consists of four plates : "Top Ten" full-screen, "Oasis" freeze, "Bjork" freeze and the "Jane's Addiction" freeze. A very soft and gentle color palette with lots of orange tones were used for this logo's background. The formation of the logo itself is related to the symbolism of the subculture that listens to this music. The rollerboard, skateboard, snowboard or even a sky-diving-board may be responsible for the curvature of the Alternative music section's logo.

For all these sections, variations of the Helvetica family of fonts were used for the sake of consistency and ease of comprehension by the general public. All of the designs were individually manipulated and not one of them uses the default type values of the font formulae.

It was important for me to distort and re-organize them in such a way that through harmony and contrast, these normally simple and straight forward fonts would re-appear as pieces of artwork, taking on separate artistic and cognitive values within the contexts of the individual designs.

The pointillized texture on the backgrounds were carefully selected to be separate and individual within themselves for every section. However, after all the color differences, tonalities and conversions to duotones, one cannot fail to recognize the consistency of the overall corporate identity of the program after viewing all the different sections.

Conclusion

My most important mission in this project was to apply the tried and true rules of formal graphic design to the relatively new area of television graphics. Just as using graphic design for other areas of more traditional communication, I have tried to experiment with the medium of television, using the same basic principles --my only limitations being the color palette, aspect ratio and image quality of the medium itself. On the other hand, the potential of the medium to reach the public in general instantly and omnipresently, caused me to take my efforts to the limit and make the best of the limitations of the medium. In the end, these efforts did pay back when the overall consistency and originality of the program News Cafe came through.

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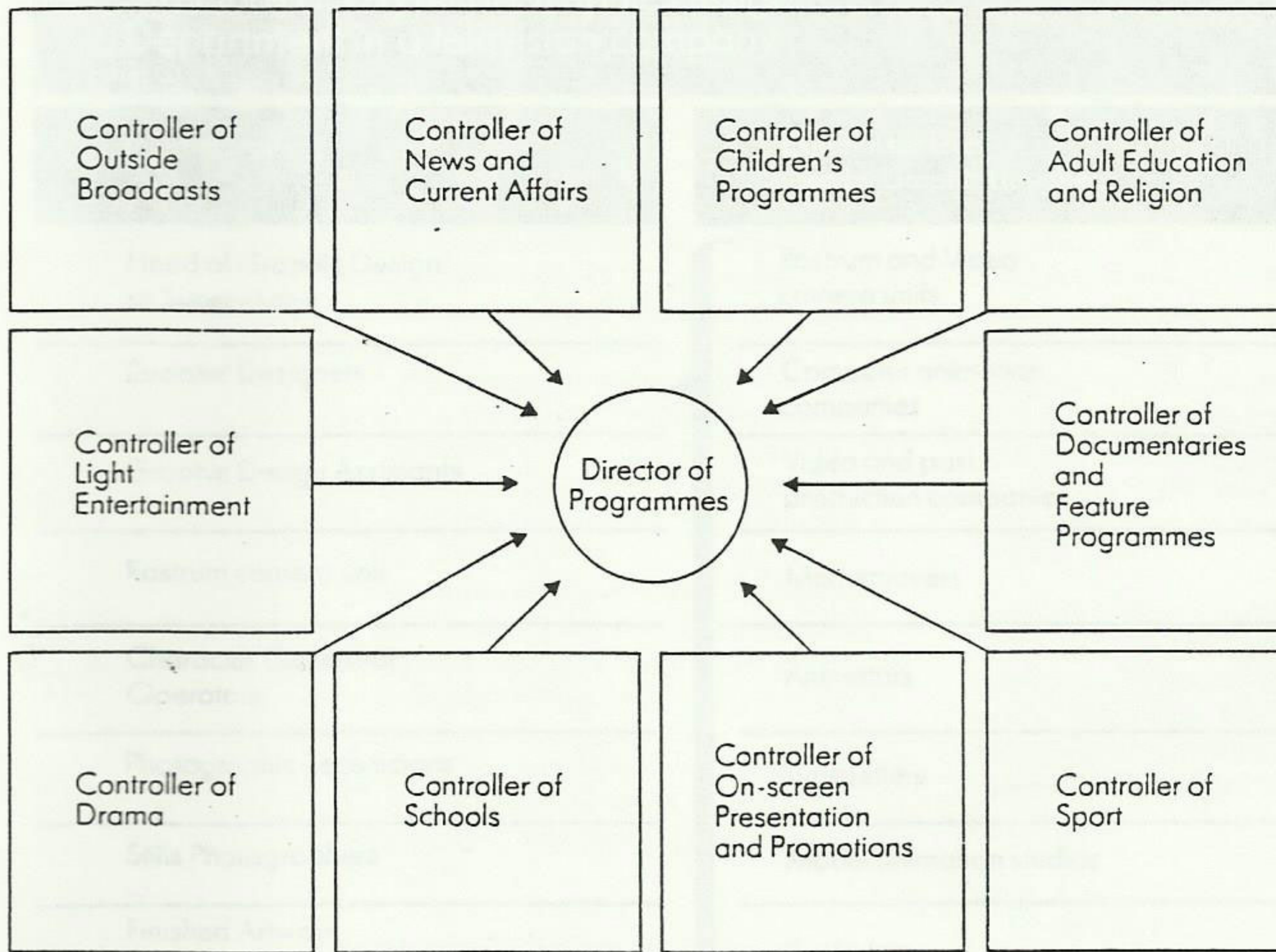
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Organisation of a typical television company

Finance
 Accounts
 Sales/Marketing

Overseas programme sales
 Publicity and promotions
 Administration

Staff relations
 Business affairs
 Industrial relations



These groups require all these services —among them Graphic Design!

Technical Operations	Engineering	Visual Services	Production Services
Central Technical Video Services Telecine Film cameras Video cameras Film editing Video editing Sound Outside broadcast services	Research and development New equipment New projects	Set design Graphic design Costume design Wardrobe Lighting Scenic artists Make-up Special effects	Wardrobe Casting Scripts Music and music library Floor managers Prop buyers Scenery construction Production planning Photographic library

Structure of a typical Graphic Design Department in a television company	
Internal Staff	External facilities used by Graphic Designers
Head of Graphic Design or Supervisor	Rostrum and Video camera units
Graphic Designers	Computer animation companies
Graphic Design Assistants	Video and post production companies
Rostrum camera unit	Modelmakers
Character Generator Operators	Animators
Photographic Technicians	Typesetters
Stills Photographers	Model animation studios
Finished Artwork Technicians and Lettering Artists	Illustrators
Signwriters	
Computer Operators and Programers	

Painting by numbers

Television graphic design and animation have benefitted in a spectacular way from the application of computer science over the past decade. Few viewers are unaware of its impact.

'Painting by Numbers' was the title of an excellent edition of the BBC 'Horizon' series and it told the story of the emergence of computer technology – highly developed in the United States for the space programme and then applied to the world of entertainment. Yesterday's three-dimensional graphics for flight simulators became on-screen graphic animation for television idents and programme titles by the mid-1970s.

The emergence of the graphic designer

Throughout the years the broadening of the service has had the effect of encouraging bigger and bigger audiences. As these grew, the income grew from licence fees, and in the case of commercial television from advertising at a spectacular rate. A television franchise was 'a licence to print money' said Lord Thompson—perhaps unwisely.

John Halas wrote in 1967: 'As the output of graphic design for television reached considerable proportions, more and more stations established their internal graphic departments. The departments have grown in size and some of them, such as those of CBS and NBC in America, and the BBC in Great Britain, now have a staff of up to 40 persons.'*

The first graphic designers

Richard Levin was one of the first professional designers of his generation to work in television. His experience, prior to becoming Head of Design at the BBC in 1953, was mainly as an exhibition designer and like many in the ebullient days of the 1951 Festival of Britain was important in enhancing the role of designers and design in many new areas. Animators, typographers, illustrators and designers for print, as well as those trained in architecture, all gained a great deal from the Government sponsorship provided by the Festival. Recognition of design was then followed-up by industrial backing – all part of the post-war recovery.

Levin was able to persuade the BBC hierarchy that there was a rising generation

of designers who were well-trained and that there was an increasingly necessary job for them to do in television. They would plan the presentation of stills, the production of lettering and, however simple at that period, make animated sequences. In 1954 he arranged for the BBC to employ their first full-time art school-trained graphic designer. His name was John Sewell. John had been at Hornsey School of Art where as a student he was seen to have a strong interest in film and film-making which he carried with him to the Royal College of Art's School of Graphic Design. This was then under the Professorship of Richard Guyatt, a contemporary of Levin, and also a contributing graphic designer to the Festival of Britain. British graphic design for television had found its first footing.

Was this far-sighted activity at the BBC prompted, or inspired, by the news that by autumn of 1955 the rival network of commercial television would appear to woo the audiences away from the twenty year old BBC monopoly? Whatever the cause, the move was well-timed, shrewd and in the long term very influential.

Training for television design

From 1954 the number of television designers began to expand at the BBC and in ITV. In London ABC and Rediffusion, in Manchester Granada, in Birmingham ATV, and all the smaller stations employed graphic designers who adapted to the new medium very quickly and later moved on to other companies.

Most of them came from art schools where, since the Second World War, the emphasis had been on applied design rather than the 'fine art' dominance which had pervaded them pre-war. Change towards industrial and applied design occurred in all major countries.

The strong influence of the Bauhaus and industrial design was beginning to spread through the 1960s and permeate art education. The Central School of Art Graphic Design Department, under Colin Forbes, and the London College of Printing, among other schools in the UK were very influential in removing the bias against 'commercial' design, as well as providing the students who could be recruited into advertising and television work.

Another contribution from John Halas from 1967: 'Film and television graphics have suffered from a feeling of inferiority in that they were outside the mainstream of

*Film and TV Graphics/John Halas/Graphis Press 1967

production output. The flow in the case of television has in fact become a flood with a tendency to sweep away the finer points of production, where the role of graphic art lies. But gradually even *in television* (my italics) good design is emerging.*

Animation in the early days

The impulse to produce moving images was very strong but few directors realised then, or now, the amount of work necessary to produce the type of animation which they saw in the cinema and early television commercials. Teams of people are required to produce even short amounts of hand-drawn animation and the more elaborate each cel the more work there is for the tracers and painters. The graphic designer working in television alone, or with perhaps one assistant, has always had to find 'shorthand' methods and use as much improvisation and ingenuity as possible.

The first years set the pattern for graphic designers to work on more than one programme at a time. Set design, and other major disciplines in television production generally demand the full-time commitment to one programme or series at a time. Research, design, modelmaking and supervising the building of a range of sets for a major drama series entails weeks or months of work, even with assistants. The vast amount of work and the number of animators and cel painters required for even a few seconds of animated film were outside the range and cost of making titles for most television programmes seen only once by a few thousand people. This limitation resulted in a very marked style. The rapid succession of a few still frames – and by using 'scratchback' where a drawing, or artwork, is slowly masked or painted-out, then shot frame-by-frame on film and run in reverse to build-up a complete image.

Graphic personalities

These are some of the changes which have taken place since the era of the smallest screens – when television receivers were 80% furniture and barely 20% screen – to the present day when our televisions are 95% screen and operated by remote control. The next section concentrates on individual designers who have made important contributions in this period.

Graphic design for television is youthful enough to have seen major changes in the traditional craft side of the business; everyone can feel they are 'pioneers'. However, some people and events stand out as significant and influential.

Three figures have been selected. Saul Bass because he was a catalyst for television design due to his inspired work for the film industry in the mid-1950s. Bernard Lodge is admired by his peers in Britain, and by designers abroad, as one of the most consistently creative graphic designers for television in the past twenty

five years. He has never let his acquisitive and penetrating interest in how things can be done take over before he has solved the design problems. Martin Lambie-Nairn led the break-away from the internal graphic designers within the television companies in the UK and became one of the first to set up an independent graphic design unit working for ITV and BBC. This occurred when the trade unions and the companies had matured to feel more comfortable and the importance of graphic design had become better established in the mid-1970s.

*Film and TV Graphics/John Halas/Graphis Press 1967

1 Saul Bass – making graphics move

The television networks in the USA were busy organising themselves well before the 1939-45 war but were no threat to the cinema industry until the mid-fifties when home television audiences began to increase dramatically.

One of the methods used to combat the decline in the cinema attendance was better publicity. Designers were employed to create not only the posters and printed material but the film titles.

Among the most influential and successful of these was Saul Bass. His designs were powerful enough to translate from the animations of the screen to posters, record sleeves of the sound tracks, and other outlets. Previously most film posters, with the exception of some specialist cinemas like the Academy in London, and the work of Jan Lenica in Czechoslovakia, had the subtlety of fairground flyposting.

Links with the film tradition

In this century film grew from a toy to one of the largest and most widespread industries. The silent film in the first twenty five years was an international medium, powerful because it worked in moving images largely transcending spoken language. Applying words, captions, and subtitles to a silent film was an early intrusion of the graphic element. The technical achievement of sound broke this polyglot and from then on every country had to develop separately. Masters of the silent screen like Chaplin and Buster Keaton could be seen and enjoyed with only the minimum of sub-titles by people in any country. when Al Jolson said 'You ain't heard nothing yet', in 1928, sound took away the intense concentration of

storytelling by pictures and the style of the directors and art directors of Hollywood who relied purely on images was diluted.

Television versus cinema

Using graphic designers for film presentation in the fifties sharpened-up the sense of the eye and design influence was very wide. Saul Bass made animated titles for a number of Otto Preminger's films. The first was 'Man with the Golden Arm'; then 'Around the World in Eighty Days' (which had a very long and amusing cartoon animation for the end credits), 'Anatomy of a Murder' and many others. These brought new creative energy to the mundane use of hand-lettering filmed over yards of draped satin – the cliché film title for many years. A carefully designed cinema title will help set the mood and even begin to tell the story, but it acts too late to sell seats.

The television opening title has a more direct job to do. The interest and the attention of the viewer needs to be gained and held. The repetition of a familiar and pleasing theme, using both sound and vision was found to be very effective. It is ironical that the cinema's effort to hold its audience by using graphic design was such an important stimulus on television graphic designers.

Many of the early television titles in England and America owe their style to Saul Bass. The use of photography in the 'Armchair Theatre' titles by Jim Gask produced for ABC in London and 'Famous Gossips' by Alan Jeapes for the BBC, which echoed the proportions of the newly available Cinerama system, both paid homage to Bass.

A little over thirty years after Saul Bass had designed his inspiring film work he came to London in April 1986 to a

conference entitled 'The Changing Image' at The Barbican to address an audience mainly made up of young graphic designers, most of whom had not been born when he worked with Preminger and Hitchcock. One piece he showed on that occasion from his current work was a few seconds of computer-graphic animation and it still had the Bass 'magic'.

2 Bernard Lodge – 'Look, no hands!'

There was always a strong wish on the part of many designers and engineers to produce 'graphics' using video techniques. The idea was to eliminate film and painted and drawn artwork. To create new ways of controlling the television monitor to make images.

'Images generated purely through electronics have been with us just about as long as television. The world's first high-definition television station, at Alexandra Palace in London used almost from the very beginning as its test signal a pattern known as 'artificial bars' – a black cross on a white background – which was not formed by pointing a camera at a black cross on a white backgrounds but by an electronic circuit.*

The familiar colour bars, are produced electronically, not by using art work.

Bernard Lodge was one of the first graphic designers to succeed in this objective. He was able to do it in a memorable and effective way in the title he designed for the first 'Dr Who' series made at the BBC in November 1963.

He exploited the effect which occurs when a video camera is directed at a monitor and the swirling cloud-like images produced were later the basis for the title of the programme. Essential to any effective title, and equally memorable on this occasion, was the soundtrack. The 'Dr Who' music was good and was developed electronically by the BBC Stereophonic Workshop.

Bernard had joined the BBC in 1959, after leaving the Royal College of Art, and worked there until he set-up his own company. This became Lodge/Cheesman in 1977 when Colin Cheesman, (who had been Head of Graphic Design at the BBC), joined him. They started at the time when film and computer technology were

changing dramatically and when, as they wrote themselves, they wished to 'use technology not as an end in itself but as a key to open new creative doors'.

The other area to which Bernard Lodge contributed so much effort and applied experiment was in the development of film animation techniques using the rostrum camera without the use of conventional hand-drawn animation. He did much of this work with Filmflex Limited, about a decade ago, when computer-control was harnessed to the traditional rostrum camera.

Two main techniques stand out. 'Streak-timing' where motion control on each frame produces an effect of drawn and blurred light; and 'slit-scan' where the artwork, or transparency, is viewed through a very narrow slit (as small as 1.5mm). The slot is then panned, with long exposures, on to each frame while the camera is moving. This creates controlled distortion of the original and the movements are only limited by the patience and ingenuity of the designer and rostrum camera operator. (See page 108).

A great deal of the work created by Lodge/Cheesman was for commercials and for the cinema. They contributed graphic effects sequences to 'Alien' and 'Bladerunner'. Both would admit that their 'apprenticeship' was in television graphic design and they wrote, clearly distinguishing the difference in purpose between television titles and commercials.

'Title sequences often resemble advertising films, both having in common a relatively short time-span with the subsequent concentration of image and information. But a commercial can stand alone, whereas a title sequence is by definition part of a greater unit. It must 'warm-up' the audience and hold attention long enough to establish involvement in the actual programme. This must be achieved while remaining faithful to the programme's contents and spirit.' Following these tenets Bernard Lodge has produced a succession of apt and memorable television titles.

3 Martin Lambie-Nairn – an early independent

The bright colours of the Channel 4 company identity used on the cover of this book brought the design group Robinson Lambie-Nairn a Gold Award from D&AD. This, like most other 'overnight' success stories, was the result of many years of

determination and hard work.

Martin and his company have enjoyed an enviable reputation in the design and trade press. One article on his progress was headed 'The life and TV times of a graphic wizard'.

He joined the BBC after studying at Canterbury School of Art (the same School, by chance, as Bernard Lodge) where he, like so many of his generation, came to grips with film animation as the basis of design for television. At 20 years old he joined Rediffusion.

When Rediffusion lost its franchise he transferred to LWT and served another 'apprenticeship' specialising in current affairs. He was there until the mid 1970s and established a reputation as one of the most proficient graphic designers but he also found himself dissatisfied by the second-rate position he thought graphic designers were receiving within the television companies. He chose to leave and teamed up with fellow LWT designer Colin Robinson in a general graphic design partnership. From the beginning print work

and television graphic design were handled side-by-side. They prospered, moved to larger premises and from there wrote a canvassing letter to an executive at the newly created Channel 4.

The letter worked and in competition with some of the larger, and longer established, graphic design groups in London they won the day. The now very much admired flying sectioned '4' was produced in the United States because no computer house in London was capable of carrying out the animation. The whole exercise was thought to be extravagant but the proof that this was well spent and contributed a great deal to the acceptance of the newly founded Channel 4 is inestimable. This success has now brought confidence to a group which divides its output between 40% television graphic design and 60% print and general design. The television work has included a number of animations for advertising campaigns and given great credibility to the claim that good graphic design is a vital part of all television presentation.