Chapter IV

Literature review

4.1 Scope of Review: Use of Computer based Graphic Technology in Advertising creation started to its fullest from 2003 in India. Earlier the bigger metros, selected big advertising agencies, the processing houses also had access to the same. Thanks to the reach and spread of technology, today everyone who fancies himself as an advertising man/designer has access to this wonderful world of graphic technology.

A very practical and experimental approach to the study of Techno creativity in advertising was undertaken, with the help of relevant literature in the area. Not many articles with direct reference and relation to Techno Creativity were found. However many articles on New Technology, Graphic Design, Photography and Digital film making highlighting the use and the facilities were available.

Here we must note that the authors in India many a times have given emphasis on the new software and hard ware available and not on the originality of the Idea, the core of creativity. And in many cases it has been observed that the permutation and combination available within the software/hardware is considered as the Idea. This is contrary to American and European Advertising Journals where the originality of the idea is considered more important as is the case with Creativity. Idea comes first then the technology to support the idea is sought. Articles on Creativity have been written by industry heads and academicians for a very long time.

Theoretical considerations:

4.2 The concept of design has moved far beyond the traditional world of graphics. As Janni Nielsen and Josep Maria Trias have suggested in their article “From the times of the first scribes: innovation and technology within graphic design” (Digital Creativity, 2000, Vol 11, No 2, pp 89-98, http://search.ebscohost.com/) They have also described Technology, as one of the most varied disciplines, which was traditionally reserved for fields such as electronics, engineering, physics and
other highly varies areas of know-how and human knowledge. This has now been dramatically accepted into the complex world of communication and therefore into design. However at the same time, design has to constitute a necessary foundation if the current technology is to run smoothly. Indeed, many professionals with traditional training in computer science have had to become pseudo designers. In fact it is impossible to imagine a modern designer who wishes to get ahead, surrounded by anything other than a multi coloured and complex world of machines, large screens, computers, modems, electronic pens, Internet networks, scanners, diskettes, CD ROM, printers, fonts, programs and updates.

In the discussion they have pointed out that, technology as the best and fastest medium for evaluation of the quality of the design, in terms of economics, ethical aspects, scientific perspective and human efficiency. And also have described Technology as easy to use, a tool, a media, ability, economical, communicative, and it gives freedom to create unlimited possibilities. Hence a creative person carrying out this act, designs and combines his own techniques (today’s technologies) with good taste and a sense of art and creativity. With the help of digital technologies, designers have acquired tools which make it possible for them to design visual spaces, movement and sound, an area outside the traditonal media of two-dimensional paper, and are geared towards transmitting an idea in a better manner.

As Garrick Webster in Drawing on new ideas, (www.designweek.co.uk 17.03.11) Puts it Love them or loathe them, advances in technology have had a massive impact on the world of illustration and creativity. Webster suggests that in the past 20 years this has been the topic of many debates. According to some creative’s digital tools are responsible for soulless imagery, but it would be difficult to deny that digital technology has not produced a myriad of new styles. In the same article Andy Potts suggested that one should avoid traditional time consuming style and adopt Photoshop, with its versatile layers and endless editing features.

Digital illustration group, eBoy's Kai Vermehr in the same article also names the 'undo' function, Photoshop layers, and multiple versions of images, the mouse and e-mail among his list of key technologies. But bringing the discussion up to the present day and beyond, he predicts that soft interfaces - already possible on the iPad or iPhone – will be an important field. Pressure sensitivity and force feedback are still
missing in current technology 3D is being pushed to new boundaries, but eventually we'll have direct-to brain interfaces. Maybe we'll become data ourselves, 'Vermehr suggests.

**Saad Moosajee and Eli Bowes** are 3D pioneers, Moosajee achieving other-worldly compositions and Bowes generating images impossible to make by hand. 'I use a lot of Cinema 4D and Poser in addition to Photoshop, and SketchBook Pro on my iPad,' says Moosajee. 'Although I feel that sometimes I depend too much on my 3D software, it has certainly shaped my style and workflow.' Bowes adds, 'In another ten years, maybe Photoshop will be shelved as obsolete, with people sketching in 3D, and all those professionals will be there with a huge and utterly redundant skill set.'

**Is it a book, is it a screen, no it's...—graphics and the interface in electronic paper**


Simon Downs opines that there currently exists a sharp boundary, in both technological and design terms between graphic design for screen and for print. These distinctions stem from the very nature of the broadcast environment. Each has its benefits—portability and extreme durability for books (running into thousands of years), interlinking and expandability for electronic design—and its distinct drawbacks.

Nishanth Shah, director, research centre for internet and society, Bangalore, in his article Watson knows the question—(digital native, eye, The Sunday Express Magazine, March 6–March 12, 2011), discusses Watson, a product of seven years of research by IBM Research, it works on an algorithm which stimulates human language and cognitive patterns to make intelligent connections and deductions to understand the context of the clues and then provide answers.

Watson is able to display or at least simulate human emotions, as a digital native. It would be necessary to note such a technology can be a tremendous boost to advertising creativity
However the creative theories of U.S.P by Rosser Reeves, David Ogilvy’s Brand Image and Al Ries and Jack Trout’s Positioning were found to be of utmost importance.

4.3 Rosser Reeves in his book *Reality in Advertising*, (MacGibbon & Kee 1970 U.K) has emphasized the importance of creativity with the help of research and technology. He formulated the theory and practice of U.S.P- Unique Selling Proposition. ‘The totality of the advertisement must project a Unique Selling Proposition, as well as a feeling.’

U.S.P Originated at Ted Bates & Company in the early 1940’s, the theory of U.S.P with the right dosage of technology and creativity helped the agencies billings from $4,000,000 to $150,000,000 without losing a client in two years.

David Ogilvy the man, who is believed to have started the creative revolution with his brand image theory, emphasizes the importance of creativity and research and also the importance of technology. In his book *Ogilvy on Advertising* (Multimedia publications 1983 U.K) the advertisement of Ogilvy & Mather Direct Response – “The advertising agency with the secret weapon” talks about the edge they have because of the right dose of creativity and technology.
Positioning: the battle for your Mind: The same philosophy has been echoed by AL Ries & Jack Trout, in Positioning: the battle for your mind (Tata McGraw Hill Publishing 2003) Here the authors have also observed the misuse of technology – “In spite of the rapid adoption of the personal computer by U.S. businesses, we’re still drowning in paper The average office worker uses 250 pounds of copy paper a year. The “paperless office” seems a long way off. Like the motion pictures, the TV picture is really a still picture which changes 30 times a second. Which means the average American family is exposed to some 700,000 pictures a day. We have become the world’s first over communicated society.”

4.4 Are traditional ad agencies in India blind to digital advertising?
As advertising inches its way towards complete digital media, it was necessary to find out what traditional agencies think of the phenomenon. Below are some views expressed by the best in Indian and International Advertising Industry?

Ranjan Kapur
(Past Country Manager – India, WPP)
The digital space currently falls outside the comfort zone of most traditional agencies. There could be several reasons for this, but it has primarily to do with a process of communication that is alien to the creative mind, and that is currently focused on 25x8 print ads and on 30-second TVCs.

It is generally held belief among ‘traditional creative’s’ that the digital space does not get creative juices flowing nor are the rewards commensurate with the effort one has to put into it. As a consequence I do not see traditional agencies taking the lead in the digital environment. This is, therefore, creating room for hundreds of startups to come and occupy this space.

Mahesh Chauhan
(President, Rediffusion (DYR))
Today, digital advertising is confined to one of the silos in the traditional advertising agency set up.
It is not a part of mainstream media, but digital life has become mainstream. Therefore, the battle for traditional agencies is to bring digital into the mainstream media.

Unfortunately, there is a generation of leaders who are not digital migrants but digital wannabes. They do not understand this space as they have lived 40 years without this medium. In order to take digital into mainstream media, there have to be leaders who understand the digital medium.

Creative people, who think of print and TV, need to start thinking of digital media in the same breath. As far as digital boutiques are concerned, I see them as implementation agencies and not ideation agencies. Specialists will always be required to execute ideas.

Chaya Brian Carvalho
(Managing Director, bcwebwise)

Awakening to the internet would be like opening the third eye for mainline agencies, which is evident if one looks at what they have achieved in this segment. They have not been able to cut much ice simply because they cannot grapple with this medium.

One cannot replicate traditional media methodology to the internet. One has to live and breathe the internet to know how to use it. Similarly one needs to acknowledge that new creative and techno-savvy young minds are going to lead in digital creativity. More than anything else, one needs to have the guts to get measured, the nimbleness to be on one's toes in real-time, and the ability to give loads of factual information in a creative communication package. This medium is extremely cost-efficient. It may be scary for mainstream agencies to imagine the future with this medium playing an increasingly dominant role because that would mean diversification into an area that is going to eat into your main business.

Priti Nair Chakravarthy
(Executive Creative Director, Lowe)

Traditional advertising agencies are not turning a blind eye to the digital medium. It-
will be a while before digital advertising takes over from the traditional media of advertising. It is just that the need of the hour still remains television. The reach, programming, entertainment, target and brand decides that. However, for brands where the target is teenagers, who spend a large amount of their time on the net, digital advertising comes as a part of the multimedia package. But it is always an add-on to mainstream media.

As Natalie Aranda writes about business and technology:

There is a new form of advertising growing with great speed in the current industry and it's called the Digital Signage. This advertising form is rocking the digital advertising world with its great features which are awesome just like its name implies. In digital signing, the electronic data is handled and controlled from one administrative console running the digital signage software and is sent across to others terminals without having to change their physical location. In other words, the content and/or message that are going to be displayed on the sign are shown on every electronic screen.

http://EzineArticles.com/?expert=Natalie_Aranda

Today advertising has come to stay not as a necessary evil but as a vital force in our total economic and social life. Its power is great and has doubled with the help of technology based creativity, but those who use it must also realize that their responsibility is even greater.

Whatever the end purpose, all advertising design starts from the same basis. That is the task of the designer/creative director is to fulfill two fundamental considerations—one to the client, the other to the client's market. In every undertaking, these considerations are most important and upon them rest the advertising agencies success or failure.

4.5 Advertising design is also called the art and profession of selecting and arranging visual elements—such as typography, images, symbols, and colors—to convey a message to an audience. Sometimes advertising graphic design is called "visual communication." It is a collaborative discipline: writers produce words and
photographers and illustrators create images that the designer incorporates into a complete visual message. Although graphic design has been practiced in various forms throughout history, it emerged as a specific profession during the job-specialization process that occurred in the late 19th century. Its evolution has been closely bound to developments in image making, typography, and reproduction processes.

**Design** is a creative process it involves a client and a designer and technology usually completed in conjunction with producers of form (i.e., printers, programmers, sign makers, etc.) – this is undertaken in order to convey a specific message (or messages) to a targeted audience through a media. The term "graphic design" can also refer to a number of artistic and professional disciplines that focus on visual communication and presentation, where use of technology is high.

The field as a whole is also often referred to as *Visual Communication* or *Communication Design*. Various methods are used to create and combine words, symbols, and images to create a visual representation of ideas and messages. A designer may use typography, visual arts and page layout techniques to produce the final result. Design often refers to both the process (designing) by which the communication is created and the campaign (designs) which are generated.

Common uses of graphic design include identity (logos and branding), web sites, publications (magazines, newspapers, and books), advertisements and product packaging. For example, a product package might include a logo or other artwork, organized text and pure design elements such as shapes and color which unify the piece. Composition is one of the most important features of graphic design, especially when using pre-existing materials or diverse elements.

**Tools**

![Image of a pencil](http://en.wikipedia.org/wiki/Frank_Simoes)

The pencil is one of the most basic graphic design tools, and the first technological invention, as they say it all starts with a pencil and paper.
The human thought process may be the most important advertising graphic design tool. Along with technology, advertising graphic design requires judgment and creativity. Critical, observational, quantitative, and analytical thinking is required to design layouts.

The method of presentation (e.g., arrangement, style, medium) is also equally important to the advertising. The advertising layout is produced using external traditional or digital image editing tools. The appropriate development and presentation tools can substantially change how an audience perceives an advertisement.

In the mid 1980s, the arrival of desktop publishing and graphic art software applications introduced a generation of designers to computer image manipulation and creation that had previously been manually executed with great finesse and also difficulty, as it was very time consuming. Computer graphic design enabled designers to instantly see the effects of layout or typographic changes, and to simulate the effects of traditional media without requiring a lot of space. However, traditional tools such as pencils or markers are useful even when computers are used for finalization, a designer or art director may hand sketch numerous concepts as part of the creative process. Some of these rough sketches may even be shown to the client for early stage approval, before the creative director develops the idea further using the available computer and graphic design software tools.

Today, computers are considered an indispensable tool in the advertising and graphic design industry. Computers and software applications are generally seen by creative professionals as more effective production tools than traditional methods, due to ease of use and time consumption. However, some designers continue to use manual and traditional tools for production, such as Milton Glaser, one of the best in the world.

New ideas can come by way of experimenting with software tools and methods laid down by the advertising design schools. Some creative directors explore ideas using pencil and paper even today. Others use many different mark-making tools and resources from computers to sculpture as a means of inspiring creativity. One of the key features of advertising graphic design is that it makes a tool out of appropriate image selection in order to possibly convey meaning.
Computers and the creative process

There is a lengthy debate today on whether computers enhance the creative process of advertising graphic design. Due to the fact that rapid production from the computer allows many designers to explore multiple ideas quickly with more detail than what could be achieved by traditional hand-rendering or paste-up on paper, moving the designer through the creative process more quickly. However, being faced with limitless choices does not help isolate the best design solution and can lead to endless iterations with no clear design outcome. This can be observed in many advertisements that we see today, they are very well finished but lacking the emotional content to reach out to people.

An advertising designer may use sketches to explore multiple or complex creative ideas quickly—without the distractions and complications of software. The seasoned senior creative directors have been found to do that. In some highly specialized design firms even today hand-rendered comps are often used to get approval for an idea execution before a designer invests time to produce finished visuals on a computer or in paste-up. The same thumbnail sketches or rough drafts on paper may be used to rapidly refine and produce the idea on the computer in a hybrid process. This hybrid process is especially useful in logo design and animation graphics where a software learning curve may detract from a creative thought process.

This traditional-design/computer-production hybrid process is many a time used for freeing one’s creativity in page layout or image development as well. In the early days of computer publishing, many ‘traditional’ graphic designers relied on computer-savvy production artists to produce their ideas from sketches, without needing to learn the computer skills themselves. This however led to the downfall of many a designers and photographers who could not adapt and progress with time. However, this practice is less common today since the advent of desktop publishing over 30 years ago. The use of computers and graphics software is now taught in most graphic design courses and those from old school have learned the hard way.

There are few advertising campaigns which can be completed entirely by the creative director’s skill alone, and most involve the added expertise of specialists such as...
illustrators, photographers, copy writers, printers, film makers etc. And they all use technology to its fullest

In many ways, it is curious coincidence that the term 'design' or 'graphic design' 'creative' is used in advertising in which the time spent on actual design/creative represent a small proportion of the job In practice, the creative director also acts as a coordinator, his or her knowledge having to incorporate extensive aspects of every ancillary reproduction process This knowledge permits the creative director to make aesthetic decisions with the maximum amount of flexibility within each technical parameter, and this aesthetic awareness is used to police the standards of technological advancements

It is very important, therefore that the creative director is totally familiar with every aspect of the design process in order that he or she may tackle with confidence and assurance the most important part of their involvement- that of the design of the advertising itself.

4.6 Typography among the many basic considerations of advertising layout is the consideration of typographic design Within the same that require a great amount of understanding are varying width of alphabetical characters and the spaces between them And also the choice of fonts, this understanding is essential in order to achieve the twin aim of aesthetic appeal and legibility

Photography, along with typography the mostly widely used and important element in advertising is photography, and the Creative director’s involvement with it takes many forms For Advertising purpose, photographs are used either to provide an illustrated record or to add to or enhance an editorial or promotional concept

In 1987 Kodak had developed the world’s first megapixel CCD (Charged Coupled Device) imager, (Which was a CanonF1 body) in 1989 the first tactical camera called HAWKEYE II (which was a Nikon F3 body) Also along with the same came D 5000 in1989. In 1990 again on a Nikon F3 stock body came the IRIS camera Later came a host of other cameras from Kodak and then the individual camera manufactures
jumped in to the band wagon and today Nikon, Canon, Leica, Hasselblad are the top contenders in digital photography.


Photography arose from the work of artist, scientist, and technologist in the 19th century, and has grown to become a medium that touches every part of human activity. From the earliest Black-and-white prints to the latest digital images, in advertising, photography has the power to challenge, inspire, inform, amuse and communicate. And the technological developments, such as digital image capture and manipulation in the late 1990s, have enabled the advertising photographers to continue to break new ground. It is difficult for advertisers to communicate without photographs; a photograph speaks a thousand words.

One hundred and sixty years after the invention of photography, an enemy rose above the horizon. Digital imaging threatened to sweep away film, make the darkroom redundant make way to light room, and to exile the hard won craft skills of picture-making. In a very short time the threat grew as numerous new enemies appeared, in the shape of more and more digital cameras, scanners, image-manipulation software, and the web, all banding together to raze conventional advertising photography to the ground.

Advertising photographers watched with steadily increasing apprehension, but the threat turned out to be the best friend advertising photography could have hoped for. Instead of opposing conventional photography, the digital technologies have in fact revitalized whole genre of photographic art and practice. All the traditional techniques which were in use with the camera and lens, as well as darkroom manipulations fully
retained their relevance as the strong foundation upon which many of today’s digital advances are based.

On the other hand the company which gave the world the power to see and communicate with visuals- Kodak roles out its last of iconic Kodachrome film roles. The Kodachrome color process is considered as the bench mark for all color process in visual graphics.

The last role of Kodachrome – Last Roll Unspools, by Nandini Sen, *(digital native. eye,\nThe Sunday Express Magazine, April 3-9 2011)*.

Steve McCurry the legendary National Geographic and Magnum photographer shoots with the last roles of 74 year old Kodachrome film which announced its retirement in 2009.

"Kodachrome/ They give us those nice bright colors/They give us the greens of summers/Makes you think all the world’s a sunny day, I got my Nikon camera/I love to take a photograph/So mama don’t take my Kodachrome away. Paul Simon singing about the film that chronicled the world for close to a century, and was immortalized in pop music. But at the turn of the century, the greens of summer, and the gold of a sunny day got sharper on LCD screens of digital SLRs. Digital Photography eventually killed the 74-year-old Kodachrome star.

Says Steve McCurry “I shot the pictures as a kind of wrap-up-to mark the passing of Kodachrome. It was a wonderful film” The end of Kodachrome is the end of a legacy but digital photography hasn’t really changed the way he sees or the way he photographs. “I’m not sure if that is a good thing or a bad thing” he says.

*If there is a magic formula for applying photo techniques successfully, it is one shared by all of the world’s great photographer’s and it is delightfully simple. Whether travelling the world or staying close to home, working in unpleasant conditions or in the safety of the studio, great photographers work hard.* *(Ang Tom, Photography, Dorling Kindersley limited, 2005)*

Indeed the union of film-based technology with digital technology has turned out to
be very fertile. This has provided the advertising world a practical, creative, and mind boggling potentialities.

There is no institute of photography that fully comprehends the commercial application of photography. This technology and knowledge is the preserve of the world’s highest paid photographer’s.

(Shooting your way to a $ million. A photographer’s strategy for success by Richard Sharabura)

"Painting with Light the Art of Advertising Photography" Without a photograph an advertisement is empty. “Photography liberated painting”, Photography liberated advertising; it gave advertising the visuals which would stay in the memories of audiences all over the world.

The Basic tool of advertising photography – whether digital or film based- still or movie/video remains the camera. Every imaging system depends on protecting a light-sensitive element from the outside. Exposure then opens it up to light, and it is at that magical, transcendent moment that the photographic process begins.

The principle of controlling the access of light to a recording medium has remained unchanged, today’s cameras-are all high-tech precession instruments- they could not be more different from their early counterparts.

The first camera models used in advertising were essentially large, empty, boxes. And with great skill early professionals could build their own models. Today’s professional camera used in advertising is not only small compared to their earlier avatar, it is incredibly densely packed. Just about every cubic millimeter is crammed
with electronic circuitry, optical, mechanical, and power management components. The earlier systems allowed the operator to only focus the lens, a modern camera has a profusion of buttons, dials, and display on its back.

Modern camera components are so delicate that only computer-controlled machinery can handle them without causing damage. Next time you hold a modern camera, remember that it has been built with more finesse, and uses more intricate parts, then the most finely crafted Faberge’ egg.

All cameras were formerly optical-mechanical devices—with combination of lenses and fine machinery—today a great deal of machinery has been replaced by electronic controls and this is a technological triumph.

But till date almost all the famous images in advertising, art and in photo journalism we know and love were created on film cameras, rather than digital. Even today some top advertising and art photographers prefer to use mechanical film cameras such as Leica, Hasselblad or Nikon for their work rather than digital. This is so because of the reliability and simplicity of the operation, but also because they allow a more direct experience of the subject.

However, technology has not completely superseded traditional photography skills: darkroom processing and making fine prints from an enlarger remain highly fulfilling creative activities. And are prized by museums and art collectors.

**Lenses**, modern lenses can record detail with great fidelity of color, sharpness as well as freedom from distortion and chromatic aberration.


For advertising purpose, photographs are used either to provide an illustrated record or to add to or enhance an editorial or promotional concept. Here success can be achieved in the first case by the photographer’s skill in recording a sharply defined.
evenly lit and correctly exposed image. Secondly the success will depend upon close communication between the photographer and the creative director and in particular, upon the creative director’s understanding of the way in which photography and photographic reproduction works.

Today’s technologically advanced computers and software can easily cope up with photographic reproduction works. Also it is possible to tether a camera directly to the computer, which is a great advantage of digital photography over film. The ability of a digital camera to connect (tether) to a computer or a laptop, in studio or away on location, in order to download photographs as they are being taken is a boon.

And the photographs can be seen by the creative director and even edited while the shot is being taken. Among the many qualities a photograph to be used in advertising should have, the most important is what is termed as reproduction ratio, the larger the reproduction ratio the better. Lighting plays the most crucial role in photography, the way the subject is lit and the amount of light reaching the photosensitive medium is the most important variable in successful photography.

For creative photographic ability to flourish commercially, a lot of time must be spent on the art of creation. To become competent in work, it becomes necessary for advertising photographers to exercise their imagination and understand the technicality of photography step by step.

The writer Mark Twain put it well: “You can’t depend on your eyes if your imagination is out of focus.”

The Foundation of any image (used for advertising or communication) is its technical quality. While the legendary Photojournalist Eugene Smith cautioned “What is the use of adequate depth of field if there is not adequate depth of feeling?” It is equally true that a picture of poor quality and aesthetics in an advertisement has to work harder to communicate to the target audience.

World’s best ideas are simple. They are right there in front of us, but many a times the creative director and the photographer are not able see them. We should learn to see...
and to observe As Sherlock Holmes said to Dr. Watson, Watson you see but you do not observe.

The goal of an advertisement is very simple: to capture the eye and sell the product. The advertising photographer tries to give the object personality, to make it sensual, glamorous, desirable, and alive. The selling power of photographs was recognized very early; in 1854 photos were first used on posters to sell real estate in Paris. And soon people were appearing in ads to lend warmth and humanity to products. Inevitably, the allure of sex appeal was added to the equation.

As approaches grew more sophisticated, so too did the methods of enhancing the product’s appeal— a bottle sprayed with water to give it that cold, fresh look, an olive coated with baby oil so that it would sparkle in a drink, fans or dryers to put a model’s hair or skirt in motion and give the photograph a feeling of liveliness. And the sophisticated lighting was used like an artist’s palette: stark for drama, soft for sexiness and filtered to make a product appear more appealing.

But gimmicks were not enough, however; what distinguished the most successful advertising photos was the total concept. For a successful advertising shoot Bert Stern, a famous photographer went all the way to Egypt and shot a martini in front of a pyramid to show the dryness of Smirnoff vodka. "The trick" says top photographer Carl Fischer, "is to go above and beyond the ordinary. If you do real life, it’s just boring."

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Victor Keppler's technique – to combine realism with “style and design” – produced sometimes startling results, as in the 1932 toothbrush ad for Johnson & Johnson. Though some consumers were baffled by the unusual composition of his advertising photos, many were seduced.

Keppler went after drama and romance, but he never tried to make products look better than they were. He said “I do not believe in taking photos that were not truthful.”
For photographer Hiro a portrait of a razor is like “a portrait of a movie star or a portrait of Apollo XI. There is no difference”. His approach was simple he never covered himself by shooting from more than one angle. “I have the photograph in my head then I take the picture”. He claims he looked at 4,000 peaches before he found the right one for Tiffany’s Elsa Peretti razor. It had to be perfect, he says, because “it is going to stay there forever in front of you”.

Irving Penn, who was a major force in magazine photography since 1943 and advertising photography since 1951, would execute with flair for both haute couture articles and Lux soap ads. Commented in 1967, use technology but “react with simple pleasure just to form and color”.

(150 years of Photography. Pictures that made a difference. Anniversary Issue, Life Fall 1988, Volume 11, No: 10)

David Ogilvy in his book “Ogilvy on advertising” says, the subject of your illustration is all important. If you don’t have a remarkable idea for it, not even a great photographer can save you. When you don’t have a story to tell in your photograph, make your product the subject of your illustration; this is seen with great perfection and beauty in Irving Penn’s photograph of Philippe Saalburg of FCB-Impact in Paris.
The kinds of photographs which work hardest are those which arouse the reader’s curiosity. He glances at the photograph and says to himself, ‘What goes on there?’ Then he reads your copy to find out. Harold Rudolph called this magic element ‘Story Appeal’. And demonstrated that the more of it you inject into your photographs, the more people look at your advertisements.

The best photograph in the history of travel advertisement evokes rural France in masterly fashion. Taken by Elliott Erwitt under the inspiration of Bill Bernbach.
Elliott Erwitt had the rare ability to capture the fleeting moment with the appropriate technology available during his time.

**On the creative directors/advertising photographer’s judgment of his own advertising work and that of others.**

“When one’s work is equal to one’s judgment, that is a bad sign for one’s judgment, and when one’s work surpasses one’s judgment, that is worse, as happens when a advertising photographer is amazed at having done so well, and when judgment exceeds the work, that is a very good omen and person so endowed will without doubt produce excellent work. He will compose few works but they will be of the kind to make others stop and contemplate such perfection with admiration.”

- Adapted from the writings of Leonardo da Vinci.

(Sharabura Richard. Shooting You Way to a Million Dollars. Canada: Chatsworth – Book, 1982.)
“Great Advertising pictures are not taken, they are made” The invention of the printing press made it possible for scientists and politicians advertisers to communicate their ideas with ease, leading to the Age of Enlightenment; this is an example of technology as a cultural force.

Print Production: Technological developments and refinements in Letterpress/Lithography/Gravure/Screenprinting/Thermography/Die-stamping/Imposition/Scoring and folding/Stitching/Binding/Blocking/Paper have been continuous and the effect of enhancement has been there for the benefit of the creative fraternity in advertising industry.

There are four principal methods in which ink can be transferred onto a surface in order to duplicate an image- by relief, planographic, intaglio or stencil printing.

In the relief method the paper is pressed into the raised areas of metal, the surface of which is inked. Commercially, this method is known as letterpress printing. A letterpress printing surface may consist of just pieces of type or, alternatively, the type can be used in conjunction with photoengraved plates. These plates can be of zinc, magnesium, copper, or plastic-are used if a line or halftone illustration is to be included. Good amount of technological precision goes into this and they are usually produced by a specialist firm of plate makers, and when mounted on a base material the whole assembly is called a ‘block’ and they are locked up together with the type in a frame called frome. This was the beginning of techno creativity in print media.

A line plate is coated with a layer of sensitive material which, when dry, is exposed to a powerful light source through a photographic negative of the original subject. The areas of coating struck by the light become hard and will not dissolve in acid, which is subsequently used to etch away the non-image areas. The coated areas are left in relief so that the plate image is formed.

The method is now not used so much but there have been advancement in the technology of the machines, resulting in the use of the same in high end art prints in Europe and USA.
To print letterpress the type of machine used is platen, flat bed or rotary. The platen press is the simplest machine which operates by bringing two flat surfaces together.

Rotary press, like the flat bed press, employs the use of an impression cylinder, but, as it is designed for high speed work, it prints on every revolution of the cylinder from a curved form on another cylinder, as opposed to every other revolution as with the flat-bed press.

Rotary presses are of two type's sheet fed or web fed (printing on both sides of a continuous web of paper passing from one cylinder to other), and can produce a fine-register high quality work at speeds making long runs extremely economical, thanks to technology. The sheet fed presses can produce up to 6000 impressions per hour, while web-fed presses operate at speeds of more than 500 meters per minute.

The modern technological development of letterpress printing is the wrap around rotary press, which prints from a one piece shallow relief plate that is fastened around a press cylinder. It is ideal for general commercial printing, folding cartons, labels and business forms. No wonder we see so much creativity and quality in them.

Planographic printing, or lithography, works on the principle that grease/alcohol and water do not mix—image areas are made to attract ink and non-image areas to repel it. This method is also used all over the world for making high end art prints.

The printing image on all commercial litho plates is produced by photographic methods, the plate is pre sensitized and then exposed to photographic medium such as positive. Today we have CTP (Computer to Plate) machines which eliminate the photographic negative/positive process. The plate is then processed.

After the process it comes in contact with the 'blanket' cylinder which, being made of rubber, prevents the delicate litho plate from damage through contact with an abrasive paper surface. The rubber responds to irregular surfaces, making it possible to print on a wide variety of papers— from newsprint to heavily textured papers to fine art papers.
Because the printing plate does not come in contact with the paper, this sophisticated process is known as offset.

Offset litho printing relies as much on its chemical as on its physical technological properties. Hence the quality printing depends not just on mechanics and on the skills of the printer, but such things as conductive atmospheric conditions.

Intaglio printing employs a process of transferring ink on to the paper from very small cells of different depths which are recessed in to the printing surface. And Gravure is the commercial process using the intaglio principle. Gravure is an intaglio printing process in which ink is drawn out from cells sunk into the printing surface. This process can be used with equal success on papers of different qualities ranging from newsprint to coated art paper. This process is mostly used for printing quality gloss magazines and packaging. This technological process is also used for such diverse applications such as printing cellophane, decorative laminates, wallpaper, postage stamps and reproductions of fine art pictures.

Gravure is an expensive process and alterations are difficult to make, so it is only economical for long print runs.


(Lem Philip Dean. Graphic Masters II. Califorina: Dean Lem Associates Inc. 1977-2004.)

4.7 Digital cinematography

Arriflex D-21

**Digital Cinematography** is the new technological process of capturing motion pictures as digital images, rather than on film. Digital capture may occur on tape, hard disks, flash memory, or other media which can record digital data. As digital technology has improved, this practice has become increasingly common. Many mainstream Hollywood movies now are shot partly or fully digitally.

Digital cinematography's acceptance was cemented in 2009 when *Slumdog Millionaire* became the first movie shot mainly in digital to be awarded the Academy Award for Best Cinematography—and the highest grossing movie in the history of cinema, *Avatar*, not only was shot on digital cameras as well, but also made the main revenues at the box office no longer by film, but digital projection. In 2010 the Academy Award for Best Cinematography again was won by a movie shot digital, and the Academy Award for the Best Foreign Language Film, *El secreto de sus ojos*, as well was won by a movie shot digitally.

**History**

This began in the late 1980s, when Sony started marketing the concept of "electronic cinematography," utilizing its analog HDTV cameras. The entail effort met with very little success. In 1998, with the introduction of HDCAM recorders and 1920 × 1080 pixel digital video cameras based on CCD (Charged Couple Device) technology, the idea was now re-branded as "digital cinematography," began to gain acceptance in the market.

In 1994 Sony Executives approached "Party of Five" (FOX) producer, Ken Topolsky and director of photography Roy H. Wagner ASC, in an effort to photograph side by side tests with Sony's prototype High Def camera and 35mm film. These resulted in one of the first network broadcast television series, FOX Pilot PASADENA (2001), directed by Diane Keaton, and photographed by Wagner. The results were so successful, shown to directors and Industry decision makers at the Directors Guild of America and Society of Motion Picture and Television Engineers (SMPTE) meetings, that many were encouraged by the film like images. Soon many Series were considering HD originated image capture.
In May 2002, *Star Wars Episode II: Attack of the Clones* became the first high-profile, high-budget movie released that was shot on 24 frame-per-second high-definition digital video, using a Sony HDW-F900 camera. Two lesser-known movies, *Vidocq* (2001) and *Russian Ark* (2002), had previously been shot with the same camera, the latter notably consisting of a single shot (no cuts).

And parallel with these developments in the world of traditional high-budget cinematography, a digital cinema revolution was occurring from the bottom up, especially among low-budget filmmakers outside of the Hollywood system.

And beginning in the mid-1990s, with the introduction of Sony's DCR-VX1000, the digital MiniDV format began to emerge. The MiniDV offered much greater quality than the analog formats that preceded it, at the same price. While its quality was not considered as good as film at that time, these MiniDV camcorders, in conjunction with non-linear editing software that could run on personal computers, allowed a large number of people to begin making movies who were previously prevented from doing so by the high costs involved with shooting on film.

Today, the cameras from companies like Sony, Panasonic, JVC and Canon offer a variety of choices for shooting high-definition video with less than $10,000 worth of camera equipment. Additionally, some digital SLR photo cameras from vendors like Canon and Nikon have started adding 24 or 30 frame per second video modes in their existing D SLR cameras.

At the high-end of the market, there is an emergence of cameras aimed specifically at the digital cinema market. These cameras from Sony, Vision Research, Arri, Silicon Imaging, Panavision, Grass Valley and Red offer resolution and dynamic range that exceeds that of traditional video cameras, these are designed for the limited resolution and dynamic range of broadcast television.

**Technology**

Digital cinematography captures motion pictures digitally, in a process analogous to digital photography. While there is no clear technical distinction that separates the images captured in digital cinematography from video, the term "digital
cinematography" is usually applied only in cases where digital acquisition is substituted for film acquisition, such as when shooting a feature film. The term is not generally applied when digital acquisition is substituted for analog video acquisition, as is the case with live broadcast television programs.

Sensors

Digital cinematography cameras capture images using CMOS or CCD sensors, usually in one of two arrangements.

Single chip cameras designed specifically for the digital cinematography market often use a single sensor (much like digital photo cameras), with dimensions similar in size to a 16 or 35 mm film frame or even (as with the Vision 65) a 65 mm film frame. This image can be projected onto a single large sensor exactly in the same it is projected onto a film frame, so cameras with this design can be made with PL, PV and similar mounts, in order to use the wide range of existing high-end cinematography lenses.
which are available. Their large sensors allow these cameras to achieve the same shallow depth of field as 35 or 65 mm motion picture film cameras, this is important because many cinematographers consider selective focus an essential visual tool.

Other cameras use three 1/3" or 2/3" sensors in conjunction with a prism, with each sensor capturing a different color. Camera companies like Sony and Panasonic, have leveraged their vast experience with these designs into three-chip products targeted specifically at the digital cinematography market. The Thomson Viper company also uses a three-chip design. These designs offer great benefits in terms of color separation, and a rolling shutter, but are incompatible with traditional cinematography lenses and are incapable of achieving 35 mm depth of field unless they are used with depth-of-field adaptors, which result in some loss of light. Taking this factor into consideration new lines of high-end lenses such as the Zeiss DigiPrimes have been developed with these cameras in mind.

**Video formats**

Unlike other video formats, which are specified in terms of vertical resolution (e.g., 1080p, which is 1920x1080 pixels), digital cinema formats are usually specified in terms of horizontal resolution.

All formats designed for digital cinematography are progressive scan, and capture usually occurs at the same 24 frame per second rate established as the standard for 35mm film.

The DCI standard for cinema usually relies on a 1.89:1 aspect ratio, thus defining the maximum container size for 4K as 4096x2160 pixels and for 2K as 2048x1080 pixels (either 24fps or 48fps). When distributed in the form of a Digital Cinema Package (DCP), content is letterboxed or pillar boxed as appropriate to fit within one of these container formats.
In the last few years, 2K has been the most common format for digitally acquired major motion pictures however, as new camera systems gain acceptance, 4K is becoming more prominent (as the 1080p format has been before). During year 2009 at least two major Hollywood films, Knowing, Red State and District 9, were shot in 4K on the RED ONE camera, as well as The Social Network in 2010.

Data storage

Broadly, there are two paradigms used for data acquisition and storage in the digital cinematography world.

Tape-based workflows

With video tape based workflow video is recorded to video tape on set. This video is then ingested into a computer running non-linear editing software, using a deck. Upon ingestion, a digital video stream from tape is converted to computer files. These files can be edited directly or converted to an intermediate format for editing. Then video is output in its final format, possibly to a film recorder for theatrical exhibition, or back to video tape for broadcast use. Original video tapes are kept as an archival medium. The files generated by the non-linear editing application contain the
information necessary to retrieve footage from the proper tapes, should the footage stored on the computer's hard disk be lost.

File-based workflows

Today digital cinematography is gradually shifting towards "tapeless" or "file-based" workflows. This trend has accelerated with increased capacity and reduced cost of non-linear storage solutions such as hard disk drives, optical discs, and solid-state memory. In case of tapeless workflows, digital video is recorded as digital files onto random-access media like optical discs, hard disk drives or flash memory-based digital "magazines". These files can be easily copied to another storage device, typically to a large RAID (array of computer disks) connected to an editing system. Once data is copied from the on-set media to the storage array, they are erased and returned to the set for more shooting.

Long-term archiving is accomplished by backing up the digital files from the RAID, using standard practices and equipment for data backup from the IT industry, often to data tapes (like LTOs). This is a great advantage as compared to film, the storage space is less and also the fear of damage is less. This method is also used for storing old classic films which have been scanned and digitally restored. The recent example is Dev Anand's classic Film Hum Dono.

Compression

Digital cinema cameras are capable of generating extremely large amounts of data, often hundreds of megabytes per second. To help manage this huge data flow, many cameras or recording devices designed to be used in conjunction with them offer compression. Prosumer cameras typically use high compression ratios in conjunction with chroma sub-sampling. This allows footage to be comfortably handled even on fairly modest personal computers; the convenience comes at the expense of image quality and many times not used.

High-end digital cinematography cameras or recording devices typically support recording at much lower compression ratios, or in uncompressed formats. Many companies often develop proprietary compression technologies that are optimized for
use with their specific sensor designs or recording technologies sometimes this is path breaking Distribution Formats. Movies shot digitally may be released theatrically, on DVD or in a High Definition format like Blu-Ray. This is the latest technology and quite popular.

The Digital Cinema Initiatives, LLC, a joint venture of Disney, Fox, MGM, Paramount, Sony Pictures Entertainment, Universal and Warner Bros Studios, has established standards for digital cinema projection. And in July 2005, they released the first version of the Digital Cinema System Specification. They also offer compliance testing for exhibitors and equipment suppliers.

Theater owners initially were not keen on installing digital projection systems because of the high cost and were concerned over increased technical complexity. However, new funding models, in which distributors pay a "digital print" fee to theater owners, have helped to change this perception.

Digital cinematography cameras

Professional cameras include the Sony HDCAM Series, RED ONE, Arriflex D-20 and D-21, Panavision’s Genesis, Silicon Imaging SI-2K, Thomson Viper, Vision Research Phantom, Weisscam HS-1 and HS-2, GS Vitec noX, and the Fusion Camera System. Independent Ad. Filmmakers have also pressed low-cost consumer and prosumer cameras into service for digital filmmaking.

Digital vs. Film Cinematography

Technical considerations

When shooting on film, response to light is determined by what film stock is chosen. A cinematographer can choose a film stock he is familiar with, and expose film on set with a high degree of confidence about how it will turn out. Because the film stock is the main determining factor, results will be substantially similar regardless of what camera model is being used. In contrast, when shooting digitally, response to light is determined by the CMOS or CCD sensor(s) in the camera, so the cinematographer needs familiarity with the specific camera model.
With digital cinematography, however, on-set monitoring allows the cinematographer to see the actual images that are captured, immediately on the set, which is impossible with film. Film cameras do often have a video assist that captures video through the camera lens to allow for on-set playback, but its usefulness is largely restricted to judging action and framing. Because this video is not derived from the image that is actually captured to film, it is not very useful for judging lighting, and because it is typically only NTSC-resolution, it is often useless for judging focus.

**Portability**

The 35 mm film cameras cannot be sized down below a certain size and weight, as they require space for a film magazine and a film transport mechanism that have a minimum size effectively determined by the physical size of the film. While some digital cinematography cameras are large and bulky, even compared to full-sized film cameras, others are extremely compact, and offer features such as the ability to detach the camera head from the rest of the camera, allowing high quality images to be captured with an extremely compact package. The tapes, hard drives and flash memory magazines that digital cameras record onto are also far more compact than the film magazines used by film cameras. These factors can result in substantial portability advantages for digital cinematography systems.

**Dynamic Range**

The image sensors in most high-end digital video cameras have less exposure latitude (dynamic range) than modern motion picture film stocks. In particular, they tend to 'blow out' highlights, losing detail in very bright parts of the image. If highlight detail is lost, it is impossible to recapture in post-production. Cinematographers can learn how to adjust for this type of response using techniques similar to those used when shooting on reversal film, which has a similar lack of latitude in the highlights. They can also use on-set monitoring and image analysis to ensure proper exposure. In some cases it may be necessary to 'flatten' a shot, or reduce the total contrast that appears in the shot, which may require more lighting to be used.
Some of the more recent digital cinema cameras attempt to closely emulate the way film handles highlights and are used by many high-budget productions intercut with film. One notable example of such use is *Battlestar Galactica*

Digital acquisition typically offers better performance than film in low-light conditions, allowing less lighting and in some cases completely natural or practical lighting to be used for shooting, even indoors. This low-light sensitivity also tends to bring out shadow detail.

**Resolution**

The debate over the subject of film resolution vs. digital image resolution is clouded by the fact that it is difficult to meaningfully and objectively determine the resolution of either. However, the huge majority of all blockbuster movies of the first decade of the 21st century have been finished in 2K - which can easily be surpassed by mechanical as well as digital camera systems.

Unlike a digital sensor, a film frame does not have a regular grid of discrete pixels. Rather, it has an irregular pattern of differently sized grains. As a film frame is scanned at higher and higher resolutions, image detail is increasingly masked by grain, but it is difficult to determine at what point there is no more useful detail to extract. Moreover, different film stocks have widely varying ability to resolve detail.

Determining resolution in digital acquisition seems straightforward, but is significantly complicated by the way digital camera sensors work in the real world. This is particularly true in the case of high-end digital cinematography cameras that use a single large bayer pattern CMOS sensor. In general, it is widely accepted that an original film camera negative exceeds the resolution of HDTV formats and the 2K digital cinema format, but there is still significant debate about whether 4K digital acquisition can match the results achieved by scanning 35 mm film at 4K, as well as whether 4K scanning actually extracts all the useful detail from 35 mm film in the first place. However, from 2000 to 2009, the overwhelming majority of films that used a digital intermediate were mastered at 2K, independent of their budget. Additionally, 2K projection is chosen for most permanent digital cinema installations, often even when 4K projection is available.
Grain & noise

Film has a characteristic grain structure. Different film stocks have different grain, and cinematographers may use this for artistic effect.

Digitally acquired footage lacks this grain structure. Electronic noise is sometimes visible in digitally acquired footage, particularly in dark areas of an image or when footage was shot in low lighting conditions and gain was used.

Since most theatrical exhibition still occurs via film prints, the clean look of digital acquisition is often lost before moviegoers get to see it, because most major releases are in the 35mm film format and all film stocks have film grain.

Digital Intermediate Workflow

The process of using digital intermediate workflow, where movies are color graded digitally instead of via traditional photochemical finishing techniques, has become common, largely because of the greater artistic control it provides to filmmakers. In 2007, all of the 10 most successful movies released used the digital intermediate process.

In order to utilize digital intermediate workflow with film, the camera negative must first be processed and then scanned to a digital format. High quality film scanning is expensive (up to $4 a frame, although the costs of this are continually dropping). With digital acquisition, the scanning step is not necessary. Footage can go directly into a digital intermediate pipeline as digital data, although with some digital acquisition systems, it may need to be processed into suitable formats before it can be worked with.

Some filmmakers have years of experience achieving their artistic vision using the techniques available in a traditional photochemical workflow, and prefer that finishing/editing process. While it would be theoretically possible to use such a process with digital acquisition by creating a film negative on a film recorder, in general digital acquisition is not a suitable choice if a traditional finishing process is
desired. However, traditional photochemical finishes have become extremely rare for Hollywood features.

Sound

Films are traditionally shot with dual-system recording, where picture is recorded on camera, and sync sound is recorded to a separate sound recording device. Picture and sound are then synched up in post-production. In the past, this was done manually by lining up the image of the just-closed clapper board sticks with their characteristic clap on the sound recording. Today, it is often done automatically using time code data burnt onto the edge of the film emulsion and time code displayed on digital clapper slates.

Most cameras used for digital cinematography can record sound internally, already in sync with picture. In theory, this eliminates the need for synching in post, which can lead to faster workflows. However, most sound recording is done by specialist operators, and the sound will likely be separated and further processed in post-production.

Archiving

Some studios opt for a film negative master for archival purposes. There are after all numerous extent examples of original 19th century film footage which were manufactured under primitive conditions, with no consideration given to archival value, but whose original images are still clearly visible and recoverable with relatively simple equipment. As long as the negative does not completely degrade, it will always be possible to recover the images from it in the future, regardless of changes in technology, since all that will be involved is simple photographic reproduction. In contrast, even if digital data is stored on a medium that will preserve its integrity, highly specialized digital equipment will always be required to reproduce it. Changes in technology may thus render the format unreadable or expensive to recover over time. For this reason, film studios distributing digitally-originated films often make film-based separation masters of them for archival purposes.
Economics of Low-budget / Independent Filmmaking

For the last 25 years, many respected filmmakers like George Lucas have predicted that electronic or digital cinematography would bring about a revolution in filmmaking, by dramatically lowering costs.

For low-budget and so-called "no-budget" productions, digital cinematography prosumer cameras clearly has cost benefits over shooting on 35 mm or even 16 mm film. The cost of film stock, processing, telecine, negative cutting, and titleing for a feature film can run to tens of thousands of dollars according to From Reel to Deal, a book on independent film production by Dov S-S Simens, based on his 2-day film course. Costs directly attributable to shooting a low-budget feature on 35 mm film could be $50,000 on the low side, and over twice that on the high side. In contrast, obtaining a high-definition prosumer camera and sufficient tape stock to shoot a feature can easily be done for under $10,000, or significantly less if, as is typically the case with 35 mm shoots, the camera is rented.

On higher budget productions, the direct cost advantages of digital cinematography are not as significant in relation to the total budget, primarily because the costs imposed by working with film typically account for no more than a few percent of such large budgets.

Digital acquisition, however, offers numerous significant advantages on high-budget shoots, such as the ability to work faster (with fewer magazine changes and less concern over shooting large amounts of footage), to back up footage on set for additional safety, and to check important shots immediately, potentially avoiding costly reshoots. Rick McCallum, a producer on Star Wars Episode II Attack of the Clones, has commented that the production spent $16,000 for 220 hours of digital tape, where a comparable amount of film would have cost $1.8 million. However, this does not necessarily indicate the actual cost savings percentage, as the very low incremental cost of shooting additional footage may encourage filmmakers to use far higher shooting ratios with digital.
Industry acceptance of digital cinematography

Throughout the 20th century however, virtually all movies were shot on film, and back then nearly every film student learned about how to handle 16 mm and 35 mm film. While many major motion pictures are still shot on film, digital cinematography has gained widespread acceptance over the last few years and is gaining market share year by year. The majority of American and Indian episodic TV-series already are produced digitally.

Sales of digital cinema camera have massively surpassed mechanical cameras sales since 2007. The Academy Award for Best Cinematography has been won by movies shot completely or mostly digitally in 2009 and 2010.

In 2009, the Academy Award for Best Cinematography was awarded for a movie mostly shot digitally, *Slumdog Millionaire* Another nominee, *The Curious Case of Benjamin Button*, was also shot digitally. Some notable high-profile directors and producers that have shot with digital equipment And the tribe is growing. Many advertising film makers have shifted to digital for convenience and ease of operations.


4.8 Technology is changing the Advertising Business:

This article Published. January 31, 2001 in Knowledge@Wharton, suggests that, it is sometimes difficult to grasp the vastness of Internet as it links country with country, culture with culture, buzzing metropolis with distant one-horse town. Even more amazing is the fact that something so seemingly endless could become the vehicle through which an entire industry is transformed to become more personalized.

Such is the case with the advertising industry. With access to consumer information that is, in some ways, easier to collect over the Internet, and more sophisticated technology, companies are customizing their ads toward specific audiences and even zapping ads to cell phones and Palm pilots, though this is not well taken. It is possible for web surfers to interact with ads in greater depth, and they can benefit directly from an ad’s personalized message.
The technological change over the years promise to become more advanced as the bandwidth increases and provides more richly-textured opportunities for advertisers to tell their stories.

They are fundamentally changing the way advertisers relate to their customers. Customization has serious implications for the marketing business and the greater objective of brand development.

"The Internet has become more and more a part of the communications community in the past seven to eight years, more dramatically in the last three or four," remarks Richard Gillespie, president of Gillespie Advertising in Princeton, N.J. "The delivery of the message has been made easier. Rather than sending out junk mail and trying to gain a 1% to 2% response rate, the more I know about the person I'm communicating with, the more valuable I can make that information. Rather than my invading your space with generic messages, I can send you communications that have value to you. The power has moved from the deliverer of the message to its recipient."

After more than three decades of technological evolution, creativity isn't what it used to be. I don't mean that the pool of creative advertising talent is shrinking; I mean the way creative people go about creating is different. It's more than exchanging typewriters for computers or art tables for graphic design programs; it's a complete shift in the creative process.

It started when IBM introduced the first affordable desktop personal computer. With a monochrome screen, no hard drive and an unbelievably slow microprocessor, it proved that a computer could be a practical office accessory. As desktop units became more accepted in the workplace, other computer manufacturers began churning out armies of clones, with prices always falling and quality always rising.

After years of fearing new technology (let us remember all those "technology gone wrong" and "evil computers take over the world" movies from the 1970s?), at last it was OK to have a computer. The trouble was, most people didn't understand computers or feel comfortable with them because they were built by technophiles for left-brained people. Earlier Creative types just couldn't relate to this and stuck to their trusty typewriters and X-ACTO knives (tools used for cut and paste).
Then in year 1984, in a series of media pretension, Apple introduced the Macintosh. It happened during the Super Bowl on Jan. 22 with a 60-second Orwellian epic, directed by Ridley Scott (the man who directed the movie "Alien"), in which a young woman lobs a hammer at a big screen image of Big Brother, a typical George Orwell's "1984." As one advertising industry guru put it, "The commercial changed advertising; the product changed the ad business; the technology changed the world."

We do not know how much this much talked commercial changed advertising, but the product Apple Macintosh did change the ad business. And the technology changed the world, or at least our perception of it.

Suddenly, the whole world felt that it was not only OK to have a computer in the office, it was desirable. Though the original Mac was primitive, by today's standard it offered a new way of thinking about computers. As they say for the first time, here was a computer built for right-brained people. Visual thinking held the key, with friendly on-screen icons like folders and trashcans and a mouse to move the cursor around the screen. And with the introduction of PageMaker software and Apple's laser printer, ad agencies and in-house communication departments finally could produce quality work on the desktop.

Plus, you didn't have to be a trained "artist" to become a graphic designer. This became a boon and also a curse, as those who very trained in art and could not adapt to the new technology had to leave the ad industry. And untrained computer savvy generation took over.

Since then, the wave of changing technology has washed over us again and again. But the interesting thing isn't how technology has changed but how technology has changed all of us in the advertising business.

Today we are working more creatively, but the way we work at creating is different. Look at how writing has changed. Writing once was a linear process. You sat down at a typewriter and tapped out a first draft, edited it, then retyped it. No matter how many drafts you went through, you always ended up with a fixed manuscript that looked and felt official and unchangeable.
With computers, it's totally different. It's more than just typing on a computer screen. You are free from linear thinking. Advertising Copy can grow naturally from any starting point. If you get stuck, then it is possible to just write the next few paragraphs and bridge the gap later. If you make a mistake, just delete and write it again. Writing and editing, which were once two separate stages, are now one and the same.

Graphic designers also have gone through the same experience; with the fixed progression from thumbnail to full layout giving way to a constantly evolving on-screen design. The printout of a design at any given stage is just a copy of the growing "ideal" design inside the computer. A design never reaches a truly final stage, it's always open for improvement, in today's environment. Is this good? I think so. Technology often is criticized for taking us further from the natural order of things. But in my experience, technology brings us closer. Today, creating advertising can be more organic and free flowing than it ever was with typewriters or paintbrushes. With such a low barrier to entry, surprisingly there's more bad advertising than ever.

But there's also more better advertising than ever, especially from those creative people whose fundamentals of communication are clear. Where in the idea comes first, and then they look for various technologies to support the idea. Today the technology that is being created and with which we create is also hard at work creating us. We have become like our work, ever changing and evolving. Where will it end? It won't. Change has become the only constant force. But has creativity become dependent? To a great extent yes.

W. Wossen Kassaye in Global Advertising and the World Wide Web (May 15, 1997 Prod # BH032-PDF-ENG, http://hbr.org/product/global-advertising-and-the-world-wide-web/an/BH032-PDF-ENG?Ntt=advertising&Nao=30) has observed that the potential to reach so many diverse markets makes the Web immensely attractive for global advertising. This prospect notwithstanding, compared to television and radio, there are lots of things about the Web that fit into the category of "at least not yet." Decisions about a WWW presence due to technology must address such questions as: In what ways is the Web different from traditional media? Is it appropriate for every firm? If it is to be used? It seems positive. Overall, the focus can be on how to integrate Web advertising with existing media activities. While the Web does change.
the way companies prepare ads and handle customers' queries, it tends to serve only a few distinct groups and not all customers, and is not about to replace customer service or other media advertising—at least not yet.

Creative people have started believing in embracing technological change. To most of them it is democratizing. It is liberating. And it will open doors of opportunity for advertising agencies and customers.

Here are some examples of how some of the world’s brands, from consumer durables to English football clubs, navigate the digital sphere.

4.9 The Five Commandments:

1) Though shall not treat digital as an afterthought.
   Digital is often the runt of litter when it comes to marketing spends. The specialist agencies are called in at the last minute when it dawns on the CMO that the 360-degree plan is perhaps not 360 degree enough.

2) Though shall not be content with mere followers.
   Says Karthik Nagarajan, director, Nielsen, “discussion boards and review sites are deeply important for people to track” It’s entirely possible for brands to aggregate vast numbers of fans and followers, at a great cost, even as the most essential discussions, comments and critiques happen elsewhere.

3) Though shall learn to measure right.
   Rajesh Aggarwal, president, Dentsu India admits,” Clients believe that the only form for measurement on digital is on click-throughs or transfers. It also doesn’t help when digital salespeople go around trying to sell click-through deals for brand campaigns, it is easy selling.”

4) Though shall not be blinded by ‘experience’.
   Atul Hegde, Coo, Ignitec says, “That one person today may be two or three people Digital is being championed by either people who are on it or sold on it. The senior guys are getting more involved and it’s only a matter of time before this stops being a problem”
5) Though shall learn the language of the masses. According to Aiyer BCWebwise, “local language will gather more steam with relevant content. Indians in India and abroad, particularly the more educated and evolved audiences want to get back to their roots, their culture. Tactful and relevant language usage is still an area that brands have not tapped effectively, and there is a very big opportunity to do that.”

(Source – Marketing@ Brand Republic, Brand Equity, The Economic Times, 6 October 2010)

SONY:

Campaign: Fantasy Festival

Agency: Altogether Digital

Background: In the face of increased competition from rivals, Sony wanted to build an emotional connection with 18 to 34 year-old Europeans.

Execution: Altogether Digital created Sony’s Fantasy Football where users create their ultimate music festival line up. As part of the campaign, a partnership was set up with Last.fm, which hosted and promoted the game site, giving exposure to the web service’s 40 million global users. The game, launched in November last year, encourages participants to use their musical knowledge to trade and edit their line-up based on a ‘buzz’ score – calculated according to the number of plays of the chosen artist on last fm and mentions of them online (using Yahoo! Data and Twitter). The winner of the competition will receive a VIP experience at a festival.

Results: The game closed in May, and garnered more than 50,000 users who registered their interest and spent an average of over three minutes on the site. Sony claims that 20 per cent of users have visited the site more than five times and there have been 622,039 total visits.

TOTTENHAM HOTSPUR:

Campaign: Spurs Kit Launch

Agency: Bluhalo
Background: The launch of a new kit for the season is a big event in the football calendar and is highly anticipated by fans. Premier League club Tottenham Hotspur wanted to use digital channels to unveil its new kit, and created what it claims is the first online-only kit launch.

Aims: The football club was keen to generate sales, provide a measurable return on investment and create an engaging experience that would heighten word of mouth around the launch of the kit. With no additional offline media or marketing spend, the digital campaign needed to be as compelling as possible.

Execution: Last summer, Bluhalo developed the microsite spuskit.com to reflect the club’s positioning statement that ‘Glory comes in three colors’. A freestyle footballer was filmed performing tricks clothed in the new kit. The tricks could be performed on demand for visitors to the microsite.

Users could also choose which kits to view in 360-degree panorama. Extra content, such as downloadable wallpaper, was added to the site in a bid to increase engagement. Calls to action generated click throughs to the online store, and social media tools were built into the site to boost word of mouth.

Results: According to Spurs, the campaign delivered a 99 percent return on investment within 24 hours, and 272 percent within one month. The microsite has remained active and has made a significant contribution to e-commerce sales via the club’s website.

NISSAN EUROPE:

Campaign: Sales activation

Agency: Tullo Marshall Warren

Background: Nissan Europe wanted to build brand loyalty and encourage repeat purchases among existing customers via eCRM.

Aims: The brand set out to define the primary car models of interest for individual customers and prospects, encourage them to book a test drive and ultimately convert their interest into sales. The program would need to run across 23 countries in Europe.
Execution: Tullo Marshall Warren was briefed to create a series of email template, focusing on personalization to create cut-through and make the messages as relevant as possible to individuals. Emails used existing data to identify when consumers were likely to replace their car and predict the model they were likely to be interested in. Personalization went beyond the copy of email – if the recipient’s interest was sports cars, for example, his name appeared on a chequered flag. Copy was kept to a minimum, with a link through to the Nissan website.

Results: The campaign launched in December last year and open rates so far have been 36 percent on average, versus an industry standard of 20 percent. The click-through rate for the campaign has averaged 20 percent.

MONOPOLY CITY STREETS:

Agency TRIBAL DDB

Brief: Since Monopoly’s invention in 1935 the game-play hasn’t changed all that much, but last year Hasbro unveiled a radical spin-off in the form of Monopoly City Streets. The company wanted a ‘big idea’ to promote this new version of its classic board game. At the core of Monopoly is negotiation, so any campaign would have to work at amplifying this brand value and encourage deal making. Hasbro wanted to use digital media to deliver a more intense, rewarding and social experience to Monopoly’s target audience of 12 to 17-year-old consumers.

Pitch: The Monopoly City Streets initiative was Hasbro’s most high-profile campaign of last year, and as such the pitch for the account was extremely competitive.

Following a presentation to executives at Hasbro’s global headquarters in New York, Tribal DDB London was eventually selected to promote the launch of radically revised game.

The agency’s big idea centered on taking the brand into the real world with a live game that used the Google Maps program to turn the globe into a giant Monopoly board.
The concept was developed by Tribal’s ‘ideas team’. At the start of every large brief the agency creates a specialist team composed of creative staff and technologists who brainstorm an idea and then work together to bring it to fruition.

**Creative:** The agency set out to build momentum in the campaign by creating a competition for Monopoly fans to design their own building using Google SketchUp.

A social media initiative was launched to foster a community of interest around MONOPOLY City Streets, and consumers were encouraged to vote for the top three submitted building designs to be included in the final game.

Monopoly City Streets then went live online via monopoly citystreets.com and players were given $3 million in virtual cash to purchase and construct virtual buildings on any street in the world using Google Maps. Players earned rent from their properties and could increase the earning potential of their streets by adding positive features such as schools and municipal parks.

By picking up Chance Cards, players could also sabotage their opponents’ plans by erecting negative features such as prisons or sewage plants on their virtual properties, negating all rent on a particular rival street.

With the right card, players could even demolish their competitors’ buildings and wipe them off the map.

**Media Plan:** As this was a global digital campaign, local Hasbro markets were expected to develop their own media plans around the Monopoly initiative and tailor it to their specific country of origin.

From a global standpoint, the media plan was effectively ‘earned media’ there were no paid for media ads or traffic drivers explicitly for Monopoly City Streets.

Instead, Tribal DDB created branded Facebook and Twitter accounts, as well as a well a Monopoly City Streets blog to enable word-of-mouth and advocacy to spread as simply and easily as possible.

According to information gathered by Tribal DDB, more than 22 million people around the world joined the game online after a suggestion from a friend.
Launch: Initially, Tribal DDB rolled out a teaser campaign spanning Monopoly fan blogs and social networking sites, telling relevant consumers that they would soon witness a major development of the game.

The agency had ambitious plans for the full-scale launch of Monopoly City Streets, including demolishing a real building to herald the opening of the online game and creating real Monopoly estate agents in major cities around the world to promote the initiative.

On launch day 17 million people accessed monopoly citystreets.com and started buying virtual streets. Such was the initial success of the game that all further launch campaign activity was shelved by Hasbro.

The company claims that Monopoly City Streets ranks in the top 20 biggest online games in the US, with more than 17 million visits to the website to date and around 1.4 million registered players.

Hasbro says more than 70 percent of users spend 10 or more minutes on the site during each visit, while 50 percent spend half an hour or more playing the game.

(Source – Marketing@Brand Republic, Brand Equity, The Economic Times, 6 October 2010)

From the above observations and statements and study it is possible for us to assume that technology plays an important role in today’s advertising. But at the same time it is available to all and hence unless the advertising agencies use it along with a great idea it will be next to impossible for them to create a brilliant campaign that sells, communicates and creates a memorable lasting impression.

The researcher could not find researchers or study in this area (Techno Creativity in Advertising) at the P.G. or Ph.D. levels conducted by individual students in the universities.