Chapter III

Introduction to the use of Techno-Creativity in Advertising

3.1 Technology restores to us our sense of creativity.

"Answers" as Socrates said, are often ignorance mistaking itself for knowledge. "Ask a question and get an answer but ask another question. Technology gives you a good reason not to take anything on faith. Suddenly there is so much information you can almost effortlessly find the facts for yourself. You can test your ideas and explore alternatives. The race of creative men that may well arise will be bred on such rich information and easy access." (Odyssey Pepsi to Apple by John Scully Fontana/Collins 1988)

In 1450 Johann Gutenberg invented the printing press and triggered the age of modern man. What he did in 14th century, today's computers and cameras have done in the 21st century - freed creative man from the tribal way of doing things, and triggered the age of individualized creativity.

Today we are moving in to an age where technology is becoming extremely important. Creative people are coming up with a whole new culture of what communication can be and they have visions of how the personal computer, the digital camera and printing technology is going to change the world of visual and print media. The geniuses of today are not working on ceilings or marble, they are working on gallium arsenide chips and software. If Michelangelo was alive today, he probably would have been using some of these tools! Today, to an extent, pencil, brush, canvas and palettes have been replaced with mouse, stylus and computer screen. It is believed that creative people have a very agile mind and to keep up with this pace of thinking, the advancements in technology in relation to print and visual media have been great boon. This is due to easy availability of Pentium, AMD processors, Power Mac's, with multimedia and other related software. Thermal and high end printers, with add on cards and up to 4GB or more of RAM, endless storing capacities, system based scanning facilities, CTP offset and gravure printing have also helped in visualizing the end product. Not to be left behind the digital media's
evolution is mind boggling. The blueprint of an advertisement is the art work. The Art Work can even today be manual as well as electronics based. With these entire advancements one can tend to believe that today all art works are electronics based, but that is far from truth. The day of manual art work is not over yet, because of many reasons. One of the main reasons is that the advancements which have taken place in the print and visual media have somehow been ahead of human habits and adaptability to the particular media. This can be explained, as mentioned earlier, electronics has been mainly responsible for these changes. An electronic environment needs technical support as well as human adaptability to the particular environment.

To elaborate this point not all creative people have been able to adapt to the electronic medium, for several reasons, some of them being cost and compatibility. And not all creative people or all the Advertising agencies can afford to house all the equipment, as this would run in to crores of rupees or more, and again to employ people to operate those machines. Hence they prefer to rely on specialized outside services.

An Art Work consists of several elements and components, to justify these needs, a lot of hardware and software facilities are required. Versatility is usually encouraged by the use of computer and the camera. Computers offer accuracy, precision and do away with mechanical drudgery. Computers can be programmed to give a consistent output for a period of time without setback, because a computer's memory is its greatest asset.

Artists need excellent design software to work with, but these software’s are basically a permutation and combination of art and design elements, preconceived and put together to be utilized to meet design objectives.

3.2 Three Major Contributors:

Historically there are three major contributors to, the concept the philosophy and the enigmatic practice of techno creativity.
1) The invention of movable printing type in 1438, by Johann Gutenberg gave solid foundation for information, education and advertising. Printing press started- And Techno-Creativity was born.

2) Working with light was well understood as early as 5th century BC, when the first experiments using the principle of the camera obscura were recorded. Building on this principle, Joseph Nicephore Niepce (1765-1833) created the first photograph, but it was his associate Louis Daguerre (1787-1851) who invented the world’s first widely used photographic process known as daguerreotype. This invention was demonstrated to the public with the help of French academy of sciences on 19th August 1839.

Photography was born. Photography is the most integral part of advertising. The second step to Techno-Creativity was established.

3) Apple Macintosh. The Computer that Changed Everything. On 24th January '1984, Apple Computers introduced Macintosh, (the most widely used and liked computer system of the graphic designers, photographers and advertising agencies).

http://www.apple.com/mac/

with this Steve Jobs founder of Apple Computers brought in the third step to Techno-Creativity, and then there was no looking back.

3.3 Technological Tools:

Following are the technological tools and packages commonly used in the Advertising agencies and Design studios:
Typography – the eye is a creature of habit. Good typography helps people read your copy while bad typography prevents them doing so.

Fonts: True type fonts, either Letterset or Adobe, and many independent font designers Fonts or letters in different styles were the first true designer or advertising technical tool for enhancing the looks of the advertisement and even now the right use of the fonts does create magic and a memorable experience for the reader.

David Ogilvy suggests these rules for better results

1) The copy is set in serif type.
2) Three columns of type, 35 to 45 characters wide.
3) Every photograph has a caption.
4) The copy starts with drop-initials.
5) The type is set in black on white.
6) Set key paragraphs in bold face or italic.
7) What size type should you use?
   This is 8 point and too small to read
   This is 14 point, and too big.
   This is 12 point, and about right.

8) Research suggests that reverse type is difficult to read.

The printing press technology has become more impressive and from A1 color to sophisticated four color and six color computer to plate printing machines gives excellent results The dot less printing technique gives the ultimate results though very expensive

3.4 172 years ago, a language was invented that everyone understood, Photography: Cameras that changed the history of communication and advertising
Landmark Cameras, the below mentioned cameras were a breakthrough in design and technologically excellent in their day, so well crafted that some are still used today.

1) **1839-Giroux Daguerreotype-** The 1839 Giroux is the granddaddy of those built commercially. It was focused by sliding the rear half in and out until the image on the ground glass back was sharp.

![Giroux Daguerreotype](image1)

The glass then was replaced with a highly polished sheet of silver plated cooper light sensitized by exposure to iodine fumes. The shutter was then flipped open and voila!

2) **Stereo Wet-Plate-** Made in France in the 1860 and double barreled, it shot twin pictures, such as those of Niagara Falls, which appeared three dimensional when viewed through a binocular magnifier called a stereoscope. The camera used glass plates that had to be coated with collodion, dipped in silver nitrate, and exposed and developed while wet.

![Stereo Wet-Plate](image2)

3) **The Kodak-** “You press the button, we do the rest.” proclaimed the ads for the original model, introduced in 1888. First you had to pull a string to cock the shutter. It cost $25, came loaded with a 100 picture roll of film. For $10 you
mailed the camera to Kodak, which made and mounted nice round prints, reloaded and returned the camera.

4) **Anthony View**- Tough and portable, it was a favorite toward the end of 19th century. It used 8-by-10 inch glass plates with dry gelatin emulsions that allowed pictures to be developed long after they were taken. Anthony View is the granddaddy of Sinar the ultimate camera for large format photography, the big gun as it is known in advertising photography.

5) **Speed Graphic**- The original model was the American made press photographer's standby through wars and riots hit market in 1912 ( The anniversary Model was made in 1940) Its movable lens enabled it to do much of what a view camera could. Sheet film came in 4-by-5 inch holders. The large format enabled editors on dead line to use contact prints. *It is interesting*
to note that even today the size of newspaper front page photo is 4-by-5 inches.

6) **Leica A** - The Company and the camera is synonymous with the advent of photojournalism, the Leica was the first successful mass produced 35 mm (its film width) camera.

Made in Germany in 1925, the Leica A came with a 50mm lens and a view finder on top, through which the image was seen. *Leica is considered as the inventor of 35mm format film photography and even today in digital photography they produce the best cameras in the world. Unfortunately they are highly collectable and freight fully expensive.*

7) **Hasselblad 1600F** - In 1948 the Swedish Hasselblad appeared, and the press, scientist and artist grabbed it. Tough as a safe (a special version has been used by NASA since 1962 till date (today they use the digital version) for medium
format photography), the Hasselblad 500 CM was the first camera to be used by Neil Armstrong on Apollo 11, incidentally he dropped one of the models he was carrying and the company in its advertisement claim that since you cannot by the one which was dropped as it must me orbiting somewhere in space. You can still by a similar one on Planet Earth. The camera offers interchangeable lenses and a rapid winder to crank the 120 shot roll, which can be exchanged for a film pack. Even today Hasselblad produces the best medium format digital cameras up to 42 mega pixels.

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

8) Nikon F-Right from the Start-Nikon got everything right from the beginning.

There have been few more significant milestones in photography than the advent of Nikon F SLR (Single Lens Reflex) its importance to the path taken by photography and in turn communication and creativity. The Nikon F brought huge changes to professional photography in the ten years after its announcement, changing the perceptions and aspirations of photographers, and was a major influence on photography for over two decades. Today’s Nikon’s are still a great influence.
In the late 50s the most coveted and reliable cameras for use in photojournalism and advertising were the Leica and the Contax rangefinders. Canon though an early manufacturer came to be known much later as a reliable camera for professionals.

The pinnacle for aspiration for any designer, creative director and photojournalist was a top quality 35mm professional camera which would be an extension to their visual imagination. In the 1960s everybody dreamt of owning a Nikon F the SLR used by the then new wave fashion, advertising, and press photographers.

The Nikon F had not only replaced the then top coupled rangefinder cameras but also was the yard stick by which other 35mm SLRs were measured. Interestingly when the 1968 popular film *Blow-Up* appeared, it showed the young fashion photographer played by David Hemmings using a Nikon F. The film was also responsible for a lot of young people taking up advertising and fashion photography.

What did Nikon F offer that was different from the other cameras of that time? The truth is that the Nikon F concept was a triumph of technology, planning,
anticipation and understanding the minds of creative people, and getting everything right from the very beginning.

Nippon Kogaku later to be called Nikon had the advantage of being world renowned much before the legendary Nikon F appeared in the market. Nikon range finder camera system and the performance of its lenses were undoubted. The use of Nikon lenses on American news photographers Contax cameras (and the same lenses in Nicca form, for Leicas) during the Korean War was already the stuff legends are made of.

And when Nippon Kogaku launched the camera in 1959 it was so rugged that it could survive being dropped into trees from low-flying helicopter. And Nikon introduced from the outset a full range of similarly rugged lenses from 21 mm to 1000mm; the camera also had remarkable interchangeable view finder system which gave 100% view of what could be on the negative, and offered a choice of different focusing screens. This camera was an answer to a whole range of professional news, feature, fashion and advertising photographer's prayers.

Technology that still continues to inspire: The lens mount on the Nikon F was a massive and beautifully engineered three-tongue bayonet, which was released by hefty button catch at 3 o'clock to the lens mount, as viewed from
the front. Because of the size of this button, the F is one of the few cameras with which it is easy to change lens wearing gloves.

The Nikon bayonet mount has remained unchanged throughout the whole era of Manual Focus, auto focus and digital auto focus SLRs which is a tribute to the near perfection of the original design. Simply putting it, majority of the lenses made in 1959 would fit and work on any professional 2011 Nikon SLR manually, and the same would apply to many lenses of 2011, they would fit and work on a 1959 Nikon F.

This indeed is a rare and a remarkable feat which suggested that the creative person need not discard his earlier lenses.

(Braczko Peter. The Nikon Hand Book. Fountain Press, 2000)

Nikon and users benefitted from NASA experience. The technologies Nikon used in developing cameras finally went into use in 1971. For the first
time a modified Nikon F camera and some modified interchangeable lenses were provided to NASA for Apollo 15 mission. And since then Nikon F (stands for Film/first) and now Nikon D (stands for Digital) have been supplying cameras for space missions. The cameras Nikon developed for use in space exploration are still in use today, and maintenance is still provided. The technology they use to manufacture cameras for space program is the same they use for mass consumption. That is the reason why very few modifications are required for camera supplied to NASA.

This remarkable development gave advertising photographers a very reliable tool as an extension to their creativity.

3.5 Graphic Packages Software & Hardware: Graphic packages can be classified into design, paint, analysis and presentation. Paint packages are used to create drawings on the display screen. Mouse is used as a painting instrument-a "brush" that can produce everything from lines to broad strokes. Artist can begin with a picture supplied from packages like clip art library of stored images, and then choose the color from the color library, or scan a photograph, "spray-paint" patterns even add a texture to the selected image. It is also possible to draw the artist's own creation through many packages available today.

Software:

Coral Draw: (Whichever is the latest version): This is one of the most popular DTP (desk top publishing) software in the country and the world. This software is basically an illustration program with a wide range of colors choices and facility to mix the colors. The program allows you to create graphics and text, manage your files and even import and export files between Coral Draw and other software.

Characteristic features

Several innovations to vector-based illustration originated with CorelDraw, a node-edit tool that operates differently on different objects, fit text-to-path, stroke-before-fill, quick fill/stroke color selection palettes, perspective projections, mesh fills and
complex gradient fill CorelDraw differentiates itself from its competitors in a number of ways:

The first is its positioning as a graphics suite, rather than just a vector graphics program. A full range of editing tools allow the user to adjust contrast, color balance, change the format from RGB to CMYK, add special effects such as vignettes and special borders to bitmaps. CorelDraw is capable of handling multiple pages along with multiple master layers. Multipage documents are easy to create and edit and the Corel print engine allows for booklet and other imposition so even simple printers can be used for producing finished documents. One of the useful features for single and multi-page documents is the ability to create linked text boxes across documents that can be resized and moved while the text itself resets and flows through the boxes. Useful for creating and editing multi-article newsletters, Print Ads, etc.

CorelDraw Graphics Suite

Over time, additional components were developed or acquired and bundled with CorelDraw. The list of bundled packages usually changes somewhat from one release to the next, though there are several mainstays that have remained in the package for many releases now, including PowerTRACE (a bitmap to vector graphic converter), PHOTO-PAINT (a bitmap graphic editor), and CAPTURE (a screen capture utility).

The current version of CorelDraw Graphics Suite X5 (version 15), contains the following packages:

- **CorelDraw**: Vector graphics editing software
- **Corel PHOTO-PAINT**: Raster image creation and editing software
- **Corel CONNECT**: Content organizer
- **Corel CAPTURE**: Enables several methods of image-capture
- **Corel PowerTRACE**: Converts raster images to vector graphics (available inside the CorelDraw program).
- **Bitstream Font Navigator**
- **SB Profiler**
Latest Ver. X5 (2010): Built-in content organizer (Corel CONNECT), new color management, web graphics and animation tools, multi-core performance improvement, digital content (professional fonts, clip arts, and photos), object hinting, pixel view, enhanced Mesh tool with transparency options, added touch support, and new supported file formats. It has developed Transformation, which makes multiple copies of a single object.

Other features offered are multiple page capability, spell checking and other editing features, style sheets, a graphics database, object linking and embedding and four color separations, very useful for advertising and printing work. The other applications which come along with Coral Draw are Coral Paint, Coral Mosaic, Coral Trace, Coral Show, Coral Chart, and Coral Move. Coral Paint is image editing and paint program. It gives you a full range of painting and retouching tools and lets you create new bitmapped images and spruce up existing images.

Coral Mosaic gives you thumbnail sketches or preview so that you can view the proper picture of campaign and make necessary changes. Coral Trace traces almost any format of bitmapped pictures including scanned data, and turns them into vector based images. Vector based images give your artwork smooth line not the jagged edges of bitmap, so you can take advantage of high quality laser printers and image setters.

Coral Show creates multiple page presentations Coral Charts develop and display charts that easily and powerfully express intricate ideas. Advertisements for Berger paints, Asian paints, Asian network, and many public service animation ads have been made using this package earlier. The package has immense possibilities but the proper use of this package in advertisement is not made in many instances, due to lack of knowledge and clarity of concept. Only the existing permutation and combinations have been used as designed by the software provider, http://www.corel.com/international.html.

Adobe Photoshop (Whichever is the latest version): This package was mainly made for Apple Macintosh machines. But this application is now compatible with other hardware such as IBM PC. Photoshop is used by creative people in advertising agencies, designers and photographers to create full color comprehensives. For many
photographers Photoshop and similar software's is god gifted. Traditionally the industry used to produce “comps” by hand, with the use of pencils, markers, paints, bushes, this used to consume a lot of time and money. Photoshop which is considered to be a high end system it gives better results, and with the higher costs of photographs the capability to create comps in the hands of creative director, designer and the board artist is immense. This insures that the production dept has more comfort over the final production phases thus reducing costly time consuming redo.

Today we see many advertisement material made with the help of this package. Many dream sequences, print ads and calendar’s etc are made using this package.

Adobe Photoshop is a graphics editing program developed and published by Adobe Systems Incorporated. It is primarily geared toward digital photo manipulation and photorealistic styles of computer illustration.

Founded in 1982 by two former Xerox employees, Charles Geschke and John Warnock, Adobe was an early pioneer in the software field. Adobe was located in Northern California in what is now known as Silicon Valley.

The company's first venture was into desktop publishing with the development of PostScript, a programming language for printing and font applications. Soon after selling PostScript to Microsoft, Adobe, in conjunction with Apple, began work on its first graphic application, Illustrator. Originally designed for use on Macintosh systems, Illustrator is a vector-based drawing application that features pinpoint accuracy.

Development of Photoshop

Thomas Knoll, a college student in Michigan, designed a graphics application that could be used on his computer in 1987. He named the program Photoshop and his brother John brought the program to California the following year, where he demonstrated it for executives from Adobe and Apple. Adobe bought the program and hired the brothers to continue working on it, developing add-ins and fine tuning the programming language.
Photoshop Versions: The first version of Photoshop was only compatible with Apple's Macintosh computer line. Compared with later versions, the first Photoshop was rather limited in its abilities. Users could alter a photograph or graphic on the pixel level and use the edited image in media-based forums such as computers, television and film. In 1992, Adobe released a version that was compatible with computers running the Windows system. The following year, they released a version that could be used on IRIX and Solaris, operating systems used mainly by programmers. Adobe eventually released 10 versions of the program using the Photoshop name, ending with version 7.0.1, which was released in 2002. Subsequent versions of the program were renamed Photoshop CS and were bundled with other products in Adobe's Creative Suite.

Photoshop CS

The first version of Photoshop CS was released in 2003 and came bundled with Bridge, Illustrator, InDesign and Version Cue, the premium edition also included Acrobat, Dreamweaver and GoLive. Photoshop CS2 was released in 2005 and CS3 came out in 2007. CS3 included the addition of three Macromedia programs, Dreamweaver, Flash and Fireworks. CS4 was released in 2008 and contained several more media programs. All of the programs in the CS bundle are designed to be used as cross platforms. For example, a document created in Photoshop can be exported to Flash for animation and imported into a webpage using Dreamweaver.

CS4

Photoshop CS4 features a new 3D engine allowing painting directly on 3D models, wrapping 2D images around 3D shapes, converting gradient maps to 3D objects, adding depth to layers and text, getting print-quality output with the new ray-tracing rendering engine. It supports common 3D formats, the new Adjustment and Mask Panels, Content-aware scaling (seam carving); Fluid Canvas Rotation and File display options. On 30 April, Adobe released Photoshop CS4 Extended, which includes all the same features of Adobe Photoshop CS4 with the addition of capabilities for scientific imaging, 3D, and high end film and video users. The successor to Photoshop CS3, Photoshop CS4 is the first 64-bit Photoshop on consumer computers (only on Windows – the OS X version is still 32-bit only.)
Photoshop CS5 was launched on April 12, 2010. A version of Adobe Photoshop CS5 Extended was used for a Prerelease Beta (known as "White Rabbit") A large group of selected Photoshop users were invited to beta test in mid-February 2010, the development team revealed the new technologies under development, including three dimensional brushes and warping tools.

Although there are many photo editor software but it is difficult to come to the professional standards of Photoshop and its user friendly features. Photoshop over years has enjoyed enormous popularity in both the professional and consumer markets.

(The History of Adobe Photoshop /eHow.com)

Alongside Adobe Photoshop and Adobe Photoshop Extended, Adobe also publishes Adobe Photoshop Elements and Adobe Photoshop Lightroom, collectively called "The Adobe Photoshop Family" by Adobe. In 2008, Adobe released Adobe Photoshop Express, a free web-based image editing tool to edit photos directly on blogs and social networking sites.

Features. 3D innovative, masks, color spaces, ICC profiles, transparency, text, alpha channels and spot colors, clipping paths, and duotone settings. Refine with powerful photography tools, easily select intricate image elements, such as hair. Create realistic painting effects. Remove any image element and see the space fill in almost magically, GPU-accelerated feature, powerful extensibility.

Adobe Illustrator:
(Whichever is the latest version): a common and popular package used in India and abroad by advertising agencies and design studios. This is a reasonable flexible package and can be used to draw and illustrate print advertisements.

Adobe Illustrator is a vector graphics editor developed and marketed by Adobe Systems. And the latest version, Illustrator CS5, is the fifteenth generation in the product line. Easily move your vector designs to Adobe Photoshop® to combine intricate paths and imagery, and still retain the editing capabilities of Illustrator. From
Design websites, interactive experiences, and original vector graphics that developers will love with Adobe® Illustrator®. Create pixel-aligned artwork that stays crisp when rasterized and can define up to 100 art boards in a single file.

Features:

You can find precision and power, sophisticated vector drawing control, advanced typography, Gradients and transparency, Perspective Drawing, Integration with other Adobe design applications, Industry-standard graphic file format support, Crisp graphics for web and mobile devices, Multiple art board enhancements.

Adobe Illustrator was first developed for the Apple Macintosh in 1986 (shipping in January 1987) as a commercialization of Adobe's in-house font development software and PostScript file format. Released 1.7 version in 1988. Adobe Illustrator is the companion product of Adobe Photoshop. Illustrator provides results in the typesetting and logo graphic areas of design. Introduced Illustrator 6 in 1996.

Illustrator CS was the first version to include 3-dimensional capabilities allowing users to extrude or revolve shapes to create simple 3D objects.

Among the new features included in Illustrator CS2 were Live Trace, Live Paint, a control palette and custom workspaces. Live Trace allows for the conversion of bitmap imagery into vector art and improved upon the previous tracing abilities. Live Paint allows users more flexibility in applying color to objects, specifically those that overlap.

CS3 included interface updates to the Control Bar, the ability to align individual points, multiple Crop Areas, the Color Guide panel and the Live Color feature among others. CS4 was released in October 2008. It features a variety of improvements to old tools along with the introduction of a few brand new tools. The ability to create multiple art boards is one of CS4’s main additions, although still not equal to the true
multiple page capability of Freehand. The art boards allow you to create multiple versions of a piece of work within a single document. CS5 was released in April 2010. Along with a number of enhancements to existing functionality, Illustrator CS5's new features include a Perspective Grid tool, a Bristle Brush (for more natural and painterly looking strokes) and a comprehensive update to strokes, referred to by Adobe as "Beautiful Strokes".

Adobe Flash:

History

The Adobe Flash Professional multimedia authoring program is used to create content for the Adobe Engagement Platform, such as web applications, games and movies, and content for mobile phones and other embedded devices. Flash is frequently used for advertisements and games. More recently, it has been positioned as a tool for "Rich Internet Applications" ("RIAs").

Animator Pro: (Whichever is the latest version) This software is used to create animation video films. As numbers of frames are created in this program, each and every movement of the animated subject is designed on the frames one after another and then all the frames are played one after another at a speed required for the animation film to be viewed that is 24 frames per second.

Adobe Flash Professional is the successor of a software product known as FutureSplash Animator, a vector graphics and vector animations program released in May 1996. FutureSplash Animator was developed by FutureWave Software, a small software company whose first product, SmartSketch, was a vector-based drawing program for pen-based computers. In 1995, the company decided to add animation capabilities to their product and to create a vector-based animation platform for World Wide Web, hence FutureSplash Animator was created. Initially, the only way to deploy such animations on the web was through the use of Java platform, however, the Java platform was later replaced with the Netscape's plug-in architecture. The FutureSplash animation technology was used on several notable websites such as MSN, the official The Simpsons website and Disney Daily Blast of The Walt Disney Company.

Flash manipulates vector and raster graphics to provide animation of text, drawings, and still images. It supports bidirectional streaming of audio and video, and it can capture user input via mouse, keyboard, microphone, and camera. Flash contains an Object-oriented language called ActionScript.

Two additional components designed for large-scale implementation have been proposed by Adobe for future releases of Flash: first, the option to require an ad to be played in full before the main video piece is played; and second, the integration of digital rights management (DRM) capabilities. This way Adobe can give companies the option to link an advertisement with content and make sure that both are played and remain unchanged.

Flash Player for smart phones is available to handset manufacturers at the end of 2009. The list of mobile device providers who have joined the project includes Palm, Motorola and Nokia—who, together with Adobe, have announced a $10 million Open Screen Project fund.

**Features:**

Text engine, XML-based FLA source files, Creative Suite integration, Code Snippets panel, ActionScript editing, Object-based animation model, Inverse kinematics, Advanced native drawing tools, Support for an extensive number of device runtimes, Streamline video embedding and encoding processes with on-stage video scrubbing and a new cue points property inspector.

CS5 software combines expressive design features like a new multilingual text engine and more realistic inverse kinematics effects with timesaving development features like extensible code snippets and enhanced ActionScript authoring options. In Design
PageMaker (Whichever is the latest version): At one time this was considered as one of the premium package used in design studios and advertising agencies. Today Coral is more popular. PageMaker facilitates the artist to type out and design texts (copy), arrange and design advertisements. Hence it is possible to manipulate pictures; also you can set the scale for the type as well as for pictures.

**InDesign is a direct competitor to QuarkXPress. In 2004 PageMaker development was discontinued.** [http://www.adobe.com/products/pagemaker/](http://www.adobe.com/products/pagemaker/)

**History:**

InDesign is the successor and alternative to Adobe’s own PageMaker, which was acquired with the purchase of Aldus in late 1994. By 1998 PageMaker had lost almost the entire professional market to the comparatively feature-rich QuarkXPress 3.3, released in 1992, and 4.0, released in 1996. Quark stated its intention to buy out Adobe and to divest the combined company of PageMaker to avoid anti-trust issues.

InDesign exports documents in Adobe’s Portable Document Format (PDF) and has multilingual support. It was the first DTP application to support Unicode for text processing, advanced typography with OpenType fonts, advanced transparency features, layout styles, optical margin alignment, and cross-platform scripting using JavaScript. Later versions of the software introduced new file formats. To support the new features, especially typographic, introduced with InDesign CS, both the program and its document format are not backward-compatible. Instead, InDesign CS2 has the backward-compatible .inx format, an XML-based document representation. InDesign CS versions updated with the 3.1 April 2005 update can read InDesign CS2-saved files exported to the .inx format. The InDesign Interchange format does not support versions earlier than InDesign CS.

Following versions were released:

- InDesign CS3 Server (codenamed Xenon): released May 2007
- InDesign CS4 (6.0) (codenamed Basil). Introduced September 23, shipped in October 2008
- InDesign CS4 Server (codenamed Thyme)
- InDesign CS5 (7.0) released April 2010
**Features** include integration with Adobe CS Live online services, and new Cross­media publishing, Robust text composition, Collaboration in editorial workflow, Preflighting and production, Automation, Extensibility Adobe® InDesign® CS5 software introduces breakthrough productivity and collaboration features such as simplified object editing and selection, integration with Adobe CS Live online services,* and the ability to create rich interactive documents that attract and engage readers.

**Design professional layouts for print and digital publishing:**

Adobe® InDesign® CS5 software provides precise control over typography and built-in creative tools for designing, preflighting, and publishing documents for print, online, or to mobile devices. Include interactivity, animation, video, and sound in page layouts to fully engage readers. It is possible to streamline creative reviews using CS Review, part of CS Live online services, complimentary for a limited time.

It can be used to create works such as posters, flyers, brochures, magazines, newspapers and books. InDesign Middle Eastern versions include a reverse layout feature to reverse the layout of a document, when converting a Left to Right document (Roman) to a Right to Left one (Arabic or Hebrew) or vice versa. It is also helpful when creating a multilingual document.

**3D Studio Max:**

**Multimedia software's** (Whichever is the latest version) This are also premium software's, it is a package which is a combination of many media assembled in one machine. With this you can mix voices, pictures, create jingles etc.

**Autodesk 3ds Max**, formerly **3D Studio MAX**, is a modeling, animation and rendering package developed by Autodesk Media and Entertainment. It has modeling capabilities, a flexible plug-in architecture and can be used on the Microsoft Windows platform. It's frequently used by video game developers, TV commercial studios and architectural visualization studios. It is also used for movie effects and movie pre-visualization.
In addition to its modeling and animation tools, the latest version of 3ds Max also features shaders (such as ambient occlusion and subsurface scattering), dynamic simulation, particle systems, radiosity, normal map creation and rendering, global illumination, a customizable user interface, and its own scripting language.

Early history and releases:

The original 3D Studio product was created for the DOS platform by the Yost Group and published by Autodesk. After 3D Studio Release 4, the product was rewritten for the Windows NT platform, and re-named "3D Studio MAX." This version was also originally created by the Yost Group. It was released by Kinetix, which was at that time Autodesk's division of media and entertainment. Autodesk purchased the product at the second release mark of the 3D Studio MAX version and internalized development entirely over the next two releases. Later, the product name was changed to "3ds max" (all lower case) to better comply with the naming conventions of Discreet, a Montreal-based software company which Autodesk had purchased. At release 8, the product was again branded with the Autodesk logo, and the name was again changed to "3ds Max" (upper and lower case). At release 2009, the product name changed to "Autodesk 3ds Max".

Usage: Many recent films have made use of 3ds Max, or previous versions of the program under previous names, in CGI animation, such as Avatar and 2012, which contain computer generated graphics from 3ds Max alongside live-action acting.

3ds Max has also been used in the development of 3D computer graphics for a number of video games. Architectural and engineering design firms use 3ds Max for developing concept art and pre-visualization.

Earlier versions (up to and including 3D Studio Max R3.1) required a special copy protection device (called a dongle) to be plugged into the parallel port while the program was run, but later versions incorporated software-based copy prevention methods instead. Current versions require online registration.

Due to the high price of the commercial version of the program, Autodesk also offers a free student version, which explicitly states that it is to be used for "educational
purposes only”. The student version has identical features to the full version, but is only for single use and cannot be installed on a network

Autodesk 3ds Max 3D modeling, animation, rendering, and compositing software is designed for games developers, visual effects artists, and graphic designers working on games, film, and television content, while Autodesk 3ds Max Design is formulated for architects, designers, civil engineers, and 3D visualization. [http://usa.autodesk.com/3ds-max/](http://usa.autodesk.com/3ds-max/)

**Features:**

MAXScript, Character Studio, Scene Explorer, DWG Import, Texture Assignment/Editing, General Keyframing, Constrained Animation, Skinning, Skeletons and Inverse Kinematics (IK), Integrated Cloth Solver, Integration with Autodesk Vault

**MAYA:**

Autodesk Maya is 3D computer graphics software that runs on Linux, Mac OS X and Microsoft Windows, originally developed by Alias Systems Corporation and currently owned and developed by Autodesk, Inc. The product is named after the Sanskrit word *Maya* (माया), the Hindu concept of illusion.

*Maya* was originally a next-generation animation product under development at Alias Research, Inc. based on code from a previous Alias product, *Alias Sketch*, a 3D modeler and renderer for the Macintosh that lacked animation features. The code was ported to IRIX and animation features were added. The codename for this porting project was Maya. Walt Disney Feature Animation collaborated closely with Maya's development during its production of *Dinosaur*—Disney requested that the User interface of the application be customizable so that a personalized workflow could be created. This was a particular influence in the open architecture of Maya, and partly responsible for it's becoming so popular in the industry.
After Silicon Graphics Inc. acquired both Alias and Wavefront Technologies, Inc., Wavefront's next-generation technology (then under development) was merged into Maya. SGI's acquisition was a response to Microsoft Corporation acquiring Softimage, Co.. The new wholly-owned subsidiary was named "AliasWavefront".

In the early days of development, Maya started with \textit{Tcl} as the scripting language, in order to leverage its similarity to a Unix shell language. But after the merger with Wavefront Sophia, the scripting language in Wavefront's Dynamation, was chosen as the basis of MEL (Maya embedded language).

Maya 1.0 was released in February 1998. Alias was successful in expanding its market share, with leading visual effects companies such as Industrial Light and Magic and Tippett Studio switching from \textit{SoftImage} to \textit{Maya}.

Following a series of acquisitions, Maya was bought by Autodesk in 2005. Under the name of the new parent company, \textit{Maya} was renamed \textit{Autodesk Maya}. However, the name "Maya" continues to be the dominant name used for the product. \textit{Maya} is an application used to generate 3D assets for use in film, television, game development and architecture. The software was initially released for the IRIX operating system, however this support was discontinued in August 2006 after the release of version 6.5. Maya was available in both "Complete" and "Unlimited" editions until August 2008, when it was turned into a single suite \texttt{http://usa.autodesk.com/maya/}.

\textbf{Features:}
Fluid Effects, Classic Cloth, Fur, Hair, Maya Live, nCloth, nParticle, MatchMove, Composite, Camera Sequencer

\textbf{Awards:}
On February 8, 2008 Duncan Brinsmead, Jos Stam, Julia Pakalns and Martin Werner received an Academy Award for Technical Achievement for the design and implementation of the Maya Fluid Effects system.

\textbf{After Effects:} It was originally created by the Company of Science and Art in Providence, RI, USA. Version 1.0 was released in January 1993. Version 2.1 introduced PowerPC acceleration in 1994. CoSA along with After Effects was then
acquired by Aldus corporation in July 1993; this company was then acquired by Adobe in 1994, and with it PageMaker and After Effects. Adobe's first new release of After Effects was version 3.0.

**Adobe After Effects** is a digital motion graphics and compositing software published by Adobe Systems. Its main purpose is for film and video post-production, combining multiple video sources in various ways (compositing), correcting brightness, color, and unwanted camera motion, adding visual effects, and many similar tasks.

Adobe After Effects is primarily used for creating motion graphics and visual effects. After Effects allows users to animate, alter, and composite media in 2D and 3D space with various built-in tools and third-party plug-ins, as well as individual attention to variables like parallax and user-adjustable angle of observation.

The main interface consists of several panels (windows in versions prior to After Effects 7.0). Three of the most commonly used panels are the Project panel, the Composition panel, and the Timeline panel. The Project panel acts as a bin to import stills, video, and audio footage items. Footage items in the Project panel are used in the Timeline panel, where layer order and timing can be adjusted. The items visible at the current time marker are displayed in the Composition panel.

After Effects integrates with other Adobe software titles such as Illustrator, Photoshop, Premiere Pro, Encore, Flash, and third-party 3D programs like Cinema 4D.

**Feature:**

Native 64-bit operating system support, multiprocessor utilization, and OpenGL acceleration help you work faster, innovative 2D, 3D, text, and vector graphic compositing and animation tools; deliver your final result to the widest range of formats, from mobile media to feature films, at maximum bit depth and resolution, using color management to ensure accurate results.

**Adobe Premiere Pro:** Adobe® Premiere® Pro CS5 software offers breakthrough performance for video production, enabling you to work dramatically faster thanks to the revolutionary native 64-bit, GPU-accelerated Adobe Mercury Playback Engine.
Work natively with the video formats you want and accelerate production from scriptwriting to editing, encoding, and final delivery.

It is a real-time, timeline based proprietary video editing software application. It is part of the Adobe Creative Suite, a suite of graphic design, video editing, and web development applications developed by Adobe Systems, though it can also be purchased separately. Starting with the version in Creative Suite 5 (CS5), it is a native 64-bit application for Mac and Windows, making it one of the few cross-platform non-linear editing systems (NLEs) available. As a 64-bit application, it does not run on 32-bit computers. However, in the Master Collection and Production Premium Suites, a version of Premiere Pro CS4 is included for 32-bit computers.

Premiere Pro has been used by broadcasters such as the BBC and *The Tonight Show*. It has been used in feature films, such as *Dust to Glory*, *Captain Abu Raed*, and *Superman Returns* (for the video capture process), and other venues such as Madonna's Confessions Tour.

Advantages of Premiere Pro over Premiere Elements are multiple sequence support, high bit-depth rendering, multi camera editing, time remapping, scopes, color correction tools, advanced audio mixer interface, and Bezier key framing. Premiere Pro also includes Encore for more elaborate DVD menu authoring and Blue-ray Disc authoring, and On Location for direct-to-disk recording.

History

Premiere Pro is the redesigned successor to Adobe Premiere, and was launched in 2003. Premiere Pro refers to versions released in 2003 and later, whereas Premiere refers to the earlier releases. Premiere was one of the first computer-based NLEs, with its first release on Windows in 1993. Up until version CS3, the software packaging featured a galloping horse, in a nod to Eadweard Muybridge's work, "Sallie Gardner at a Gallop". [http://www.adobe.com/special/products/photoshop/compare/](http://www.adobe.com/special/products/photoshop/compare/)

Two button mouse with scroller or an infrared mouse is a common tool seen with these packages.
There was a time when mice were not nice and a Macintosh was a rubber rain coat.

Legend on Apple Macintosh Computer

3.6 Impact of Techno Creativity on today's advertising:
Is advertising more creative today because of superior technology than it was yesterday?
This is the most debatable question. As David Ogilvy in his book "Ogilvy on Advertising", puts it this has been exaggerated by pundits in search of trendy labels. For example, the concept of brand images, which he popularized in 1953, was not really new; Claude Hopkins had described it 20 years before. The so-called creative revolution usually ascribed to Bill Bernbach and David Ogilvy in the fifties, could equally well have been ascribed to N W. Ayer and Young & Rubicam in the thirties. In India what HTA and Dattaram did in the fifties can be attributed to Rediffusion and Lintas in the seventies and O&M and Mudra later.

3.7 Can Creativity in Advertising be measured because of better technology?
It is difficult to measure creativity in advertising only because some new technology has been used. New Technology makes things easier and not necessarily better or more creative. Many a times you have to use both to justify the creative concept. For example, some of the Star Wars movie scenes used painted backdrop, and to get the specific result they had to use a still 35mm SLR film camera of 50s and 60s. This was to justify the special effect they wanted in their film and promotion. (Vaz, Cotta, Dugnam, Mark, Rose, Patricia Industrial Light and Magic the Art of Special Effects U K Virgin Publishing, 1996)

The same was repeated in the film and promotion of the Matrix motion picture. As a matter of fact the promo of Matrix motion picture on AXN channel, called making of Matrix showed how they would shoot the sequence of the film and the ad film for the motion picture with the help of a 35 mm SLR film camera.

The most important aspect of creativity in advertising is its ability to reach out to the masses, consumers still buy products whose advertising promises them value for money, beauty, nutrition, relief from suffering, social status and so on, all over the world. Irrespective of any technology used. The new technology has to be in tandem.
with the creative concept and should be a part of the overall message, rather than stand out. Gimmicks do not sell.

Advertising Research has benefited immensely because of technology, as it becomes easier for the researcher to conduct surveys online and at different places simultaneously and so has creativity. But the right use of technology to compliment the creative concept can sell the Ad, otherwise it only has a novelty value, where in the purpose of advertising is not served.

As Benton & Bowles agency puts it “If it doesn’t sell it isn’t creative” irrespective of the technology used.

*William Bernbach* who believed in finesse of execution in advertising said “One of the disadvantages of doing everything mathematically (or with latest available technology), or by research, is that after a while, everybody does it the same way. If you take the attitude that once you have found out what to say, your job is done, then what you’re doing is saying it the same way as everybody is saying it, and you’ve lost your impact completely.” (Batra Rajiv, Myers John G., Aaker David A. *Advertising Management*, Dorling Kindersley (India) Pvt Ltd 2008)

3.8 Emerging trends in Advertising:
Advertising is becoming more realistic, more efforts have been put to reach out to people through various media. Surprisingly older media have not faded. They are as potent as they were earlier. The production time has decreased and excess to the best production facilities has made Ads look glossier. The agencies tend to play this, and sometimes this doesn’t go down very well with the audience. Advertising today is research based due to availability of more resources in terms of research based agencies. Advertising reach has increased due to liberalized economy and easy access to internet.
Computers have played a major role in enhancing creativity. Has Creative Director’s dependence on them increased?

The dependence has definitely increased and in many cases ads look similar as most creative directors in various agencies end up using the same software permutation and combinations.

“Truly talented people now have to compete with techies for jobs that used to be looked upon as skilled. Now anybody with a mouse can make art and get paid. The same can be said for the person with a camera, anybody with a digital camera becomes a photographer as the camera software delivers reasonably ok results. The problem arises only when the advertisers are demanding then the professionals have to be brought in.

Recently a professor of Graphic design received in the mail an advertising flyer that announced in large headlines: "Be your own graphic designer." The flyer said that for only $29.95, the software company would send a CD-ROM disk with 12,000 "new, full-color images" and 1,555 free fonts! It promised that these "hand-drawn, quality images on CD-ROM will transform every document into a masterpiece!" As the professor put it, "This was a little troubling because I tell my students who want to be graphic designers/creative directors that it will take at least four years and $40,000 in tuition, fees, and housing before they can become graphic designers/creative directors, and I cannot promise masterpieces at the end of the four years."

Other professionals have faced similar advertising hype. But the flyer is indicative of recent changes in graphic design/advertismg brought on by the computer. Suddenly, untrained individuals have access to inexpensive tools that can be used for a variety of publications. New software has templates that will help you create newsletters, logos, announcements, letterhead, business cards, and home pages on the World Wide Web. Why hire a professional when, for under Rs.2,000, you can buy a computer program that has clip art, a multitude of type fonts, and other tools that make it easy to use by just about anyone who can follow simple instructions? And where else can you get guaranteed success? Techno-Creativity in Advertising can work well with ad agencies and creative people who come up with the idea first and then look for technologies to support them as that will be original and long lasting. Permutations and combinations are facilities which any individual with a computer and necessary software would be capable of producing. Enhanced creativity through technology has come to stay, from
3D holograms to the computer-manipulated art used in print and electronic media, the creative side of advertising is reaping its benefits of new technology to give advertisers the opportunity to break through clutter and capture attention. But sometimes many advertisements look the same because the creative’s use more or less the same finish available in the new technological hardware and software.

The line between entertainment and advertising is blurring as advertisers link computers, videotape and even film to mix fiction and reality. Many of the Coca Cola television commercials feature computer-generated characters, vintage film clips (scanned), and contemporary music personalities, intriguing viewers and breaking through the clutter.

Now just imagine seeing your name on an advertisement— that is another creative enhancement that will probably become more common as advertisers harness new technology in pursuit of micromarketing. For example Buick asked *Newsweek* and *Time* magazine, among other magazines to add individual subscriber’s names to Buick car advertisements. This creative approach helped Buick capture the attention of these potential car buyers. Enhanced creativity through technology has come to stay. The industry requires thinkers and professional communicators. Statistics show that success comes to those who produce original advertising.

3.9 Summary of Chapter: The chapter gives an introduction to the use of Techno Creativity in Advertising and highlights the three major contributors to this phenomenon. The chapter also discusses the various technological tools and Graphic Packages Software & Hardware available today. The later part of the chapter discusses the impact of Techno Creativity on today’s advertising whether creativity in advertising can be measured, what are the emerging trends in advertising due to computers enhancing creativity, and creative director’s dependence on these factors are discussed in the reference of the thesis.