

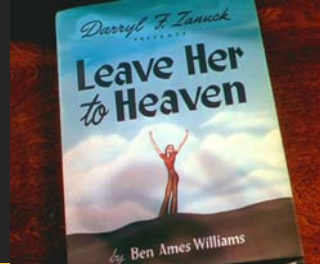
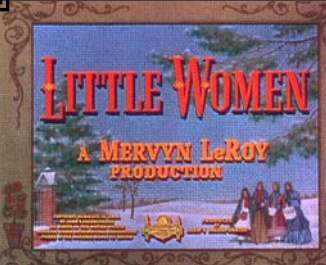
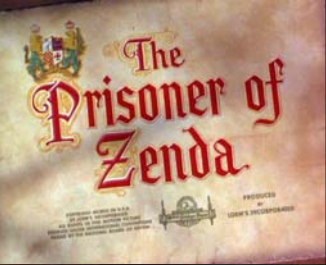
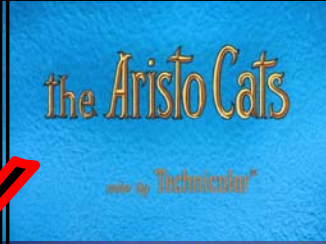


Nick Zegarac's

THE Hollywood ART

...IN

TECHNICOLOR



ALL THE COLORS OF THE RAINBOW

A Brief Romp through Technicolor's glorious history

by *Nick Zegarac*

Even if you know nothing of the organization, you know its name. Technicolor is synonymous with the movies; as readily and instantly recognizable as any trademark of 20th century movie making. The brainchild of an ambitious inventor, Technicolor has been at the forefront of technological growth in the media arts ever since its conception – always a little bit ahead of its time and ultimately dedicated to the pursuit of image excellence.

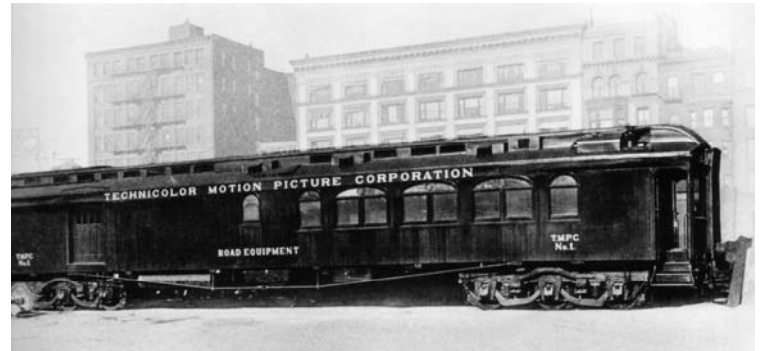
With so much activity over the last ninety years it's easy to forget that as a company Technicolor was hardly the 'industry standard' from the word 'go.' Buttressed by skepticism, ever-changing technologies and a revolving management during its later years, Technicolor often stood at the edge of a great precipice; an empire forever on the verge of dissolution or the next great technological advancement.

AFTER THE STORM: RAINBOW'S BEGINNING

In truth, there was little that was 'glorious' about either the company or its' founder's formative years. Technicolor's guiding light was born Herbert Thomas Kalmus on November, 9, 1881 in Chelsea, Massachusetts. Orphaned at age 11, Kalmus was removed from school at the tender age of 16. He took a job in a carpet store in Boston where his frugality afforded him a princely savings of \$500 that he parlayed into a college education at Massachusetts Institute for Technology (M.I.T.) – the only school that would accept him as a student. He would eventually graduate with a Bachelors of Science.

(Movie musicals and Technicolor were a winning combination in the 1940s and early 50s. Right: glowing examples of MGM's use of Technicolor. Top: Xavier Cugat with Lina Romay and his orchestra in *Bathing Beauty* 1944. Middle: Fred Astaire and Jane Powell in *Royal Wedding* 1951. Middle: Ann Sothorn and the Blackburn Twins from *Words and Music* 1948. Bottom: Kathryn Grayson and Mario Lanza; *The Toast of New Orleans* 1950. The studio's use of Technicolor was more subdued and coordinated than Fox's lurid hues. The effect, arguably, was the same: glorious!)





While a senior in college, Kalmus met and married Natalie Dunfee – a union more troublesome with each passing year. With fellow student, Daniel Frost Comstock, Kalmus and his wife toured Europe on a fellowship. He received his doctorate from the University of Zurich; then spent several years as an assistant and professor. But it was a sideline interest that would eventually come to dominate his life and career.

Technicolor's creation came almost by accident. Kalmus and Comstock had formed a partnership with W. Burton Wesscott to provide industrial and scientific research and development services. In 1912, Boston lawyer, William H. Coolidge approached Kalmus with the Vanoscope; a primitive projector that Coolidge claimed would remove the 'flicker' from motion pictures. Unfortunately for Coolidge, tests conducted by the firm proved the opposite. But Kalmus had another idea. Intrigued by the movies potential, he began work on a new type of camera – one that would be able to photograph motion pictures in color.

Reportedly, the name 'Technicolor' was inspired by a derivative of the word 'technique.' Yet, technical problems with creating color film images were only part of the challenge facing Kalmus.

(Top left: Technicolor's founder, Herbert Kalmus inspects a reel of color film. Top right: the railway car that served as Technicolor's first production/manufacturing facility. Right: Technicolor's first 'legitimate' office space. Right: an early Technicolor camera, used to film Disney's 'Flowers & Trees' the first Silly Symphony in Technicolor. Ingrid Bergman's American screen test in 1938 was shot in Technicolor, but the actress would have to wait another 13 years to appear in a color film. Stills of actresses, Steffi Duna in *La Cucaracha* and color tests of Maureen O'Hara and Merle Oberon.)





In 'garish Technicolor'. During its heyday, the lure of Technicolor's patented three strip process was that it created exceptionally sharp and lurid images. 20th Century-Fox promoted Technicolor's ability to saturate the screen with eye-popping hues more than any other studio.

Top left: Fox's biggest box office draw of the 1930s, Shirley Temple meets Queen Victoria (Beryl Mercer) in an Army Hospital in *The Little Princess* 1939. Top right: Susan Hayward sings the title track, accompanied by Richard Allen, from *With A Song In My Heart: The Jane Froman Story* 1952. Actually, Hayward lip syncs to Froman's own musical recordings.

Bottom left: Alexander Knox gives a nuanced performance as President Woodrow Wilson in *Wilson* 1944. Bottom right: Marilyn Monroe prepares to make her husband jealous by singing a few bars of 'Kiss Me' from *Niagara* 1953; the last film in which Monroe would be allowed to illustrate that she possessed more acting talent than either the studio or the public gave her credit for. In many cases, Fox promoted Technicolor often in the same credit as the film's title.)

Experimentation cost money and required vast facilities – neither luxury afforded his fledgling firm. However, the new enterprise was blessed with an infusion of brilliant minds through Comstock's association with M.I.T. graduates; Leonard Troland, Joseph Arthur Ball and Eastman Weaver – whose contributions launched Technicolor's first foray - 'Process Number One' inside the firm's first manufacturing facility – a railway box car.

'Number One' made simultaneous exposures of red and green negatives with a prism, but required the rather cumbersome use of a specially designed projector with two apertures; one red/one green to reproduce the image on screen. The chief difficulty with this process was that rarely did its red and green apertures align in perfect registration – hence the image was far from sharp and steady.



(Made for Technicolor: above and left: still enlargements from David O. Selznick's *Gone With The Wind* 1939; the first color film to win a special Oscar for color cinematography. Selznick and color consultant Natalie Kalmus did not get along on the set. Eventually, Selznick brokered a deal to remove Kalmus from the premises. His approach to Technicolor – unlike Kalmus' – was to attempt to tone down the gaiety and saturation of the color in certain scenes that Selznick felt were made more dramatic by a stark absence of color.)

But by 1916, Kalmus was enthusiastic enough about 'Number One' to make a color feature; **The Gulf Between**. It was an early and disastrous endeavor shot in Florida and it cost Technicolor a then staggering \$6,000 per week to shoot. Despite its flaws, Kalmus quickly acquired more work space and set about developing 'Process Number Two' in 1918 – a complicated gelatin relief base that photographed two sets of film negative from a single lens. By 1920, Kalmus could be proud of this advancement, even if Coolidge's initial \$400,000 investment had yet to see a penny's worth of profit in return.

Kalmus, however, had grander ideas on his horizon. With more financial aid – this time, from attorney William Travers Jerome and a pair of ad executives; A.W. Erickson and Harrison K. McCann (who, in turn approached a litany of their own clients to foot more of the bill), Kalmus secured Technicolor's future; one that garnered interest, but not a single dollar of investment from movie magnets Marcus Loew, Nicholas and Joseph Schenck. Under the latter's approval, Kalmus secured the rights to produce **The Toll of the Sea** (1922; an American *Madame Butterfly*, starring Anna May Wong and eventually released through the Metro Film Company).

Originally intended as a two reeler, the film photographed by Ray Rennahan was deemed 'too good to cut', and emerged as a five reel feature that grossed \$250,000 in its initial release – a qualified success, though not without incurred difficulties. First, the amount of lighting required to properly expose Technicolor's camera negative during principle photography necessitated



(Made for Technicolor Part II: Musicals and historical dramas were ideally suited for color. Above: Dorothy (Judy Garland) arrives in Munchkinland – the most colorful sequence shot to date in *The Wizard of Oz* 1939. Right top: “You dare turn your back on the Queen of England?” Bette Davis declares in *The Private Lives of Elizabeth & Essex* 1939. Davis’ larger than life mannerisms were tailor-made for Technicolor. Oddly enough, she never appeared in color again.



Right: Debbie Reynolds atop a ladder on an abandoned film stage as Gene Kelly sings ‘You Were Meant For Me’ from *Singin’ In The Rain* 1952. Right below: Kelly again, this time with Judy Garland for *Summer Stock* 1950. Garland eased Kelly into making movies a decade earlier in *For Me and My Gal* 1942 and it was largely due to her compassion for him then that he agreed to stand in for Mickey Rooney in this banal but fun-loving musical film that proved to be Garland’s last at MGM.



Bottom: Ray MacDonald and June Allyson cuddle beneath an umbrella to sing the title track for the film *Till The Clouds Roll By* 1945. A lush and lavish cavalcade of MGM’s most memorable stars appeared in this fictionalized biography of the life of Jerome Kern.)

banks of searing hot klieg lights hung from the rafters at a great additional expense to production costs. Second, Technicolor’s ‘bonding process’ cupped (or puckered) during projection, necessitating constant realignment. Third, Technicolor had neither the production facilities nor the manpower to produce ‘rush prints’ making it very uneconomical and not at all timely in its post production.

Despite these obvious setbacks, Kalmus conferred the concept of a ‘package’ deal with each and every producer who desired to test market his process. The advertisement of ‘Color by Technicolor’ on a film marquee meant that Kalmus’ company handled all stages of the laboratory work. Every film shot in Technicolor was assigned a trained cameraman from Technicolor who worked in conjunction with the assigned studio’s director, cinematographer, designers, make-up and wardrobe people as a technical consultant.

Afterward, Technicolor’s laboratories assumed full responsibility





(Above left: frame enlargement from *The Black Pirate* 1925 – a film that proved the fallibility of early 2 strip Technicolor. Above middle: frame enlargement from *The Toll of the Sea* 1922 – an infinitely more successful adapting of the 2 strip color process that only photographed in primary reds and greens. Above right: Lillian Russell in her only 2 strip Technicolor appearance from a 1923 short subject.

Right: Enlargement of Herbert and Natalie Kalmus during a meeting of Technicolor's board of directors. The original still is featured directly below. Although their divorce was secretly finalized by the mid-40s, the couple would go on as joint partners in Technicolor until Herbert's retirement.

Below: Becky Sharp (Miriam Hopkins) atones for her indiscretions in *Becky Sharp* 1934. The film was meant to be a triumphant debut of the 3-strip Technicolor process. Instead, it was a colossal flop that nearly sent RKO Studios into receivership. Bottom: Betty Grable posed for this Christmas card photo in 1947. Grable was always frank and down to earth about the assets she perceived had made her a star. Next to her trademark legs, Grable attributed Technicolor for her success as the war year's reigning pin-up girl at Fox.)

for the delicate processing of film negatives, as well as working with the director on preparation of raw footage into a final cut from which Technicolor then struck its general release prints. No part of the production phase was therefore left to chance.

Kalmus' personal seal on Technicolor's commitment during every phase of principle photography paid off. Film pioneer Jesse Lasky agreed to shoot **Wanderer of the Wasteland** (1923) in Technicolor. Kalmus moved his facilities from the box car to an established permanent office at 1006 North Cole Avenue. Again, the film's content proved not as important as the advertised novelty of seeing color itself. However, more and more, Kalmus was determined that a major star should appear in Technicolor.

Star power would add legitimacy to the process – make it acceptable and marketable, not only to audiences but also to the moguls who, for the most part, remained skeptical of Technicolor's staying power within the industry. The star – the first to slip from monochromatic bonds into blazing Technicolor - was one of Hollywood's biggest: Douglas Fairbanks. Billed as a million dollar epic, **The Black Pirate** (1925) spent months shooting test footage of Fairbanks at a staggering cost of \$125,000.

Though never entirely satisfied with the way he appeared in color, Fairbanks eventually completed the film. It's New York premiere was a solid success – even garnering rave reviews from the critics - but the old specter of 'cupping' marred many general release viewings elsewhere across the country where Technicolor technicians were not on hand to immediately correct the problem.

As a result, Lasky and Fairbanks confided to Kalmus that no further movies would be produced in Technicolor. Worse, Kalmus had to back out of MGM's proposition to shoot **Rose Marie** (1927) in color after he confided to studio





In the early years, convincing studios to use Technicolor was a tough sell, primarily because the process itself was cumbersome to shoot, took a long time to develop and process in post production and required the use of hundreds of lights to properly expose the film. After initial tests, false starts and outright flops, Technicolor was considered risky business by the majors. It took the pioneering spirit of Walt Disney to have Technicolor catch on.

Above: three frame enlargements from Disney's most experimental animated film – Fantasia 1940. Originally, Walt had envisioned only the Sorcerer's Apprentice sequence to be just another installment in his Silly Symphonies series. In the pre-planning phase of the cartoon, conductor Leopold Stowkowski suggested turning the short subject into a feature that would showcase classical music. Walt was intrigued and went ahead with the project that also included the first attempt at stereophonic sound.

Top left: Mickey Mouse as the Sorcerer's Apprentice commands the forces of nature. Middle: Mickey congratulates Stowkowski on his conducting the music. Top right: Fantasia's most remembered sequence: The Dance of the Hours in which ostriches, hippos, elephants and gators make for strange ballet dancing partners.



Right: The Three Little Pigs won an Oscar for best Original Short Subject and was one of the reasons Technicolor began to gain popularity in the movies. Right: Disney produced this featurette to promote the release of his first feature length animated movie: Snow White And The Seven Dwarfs 1938 – one of the highlights of the decade that was initially dubbed 'Disney's folly.' Below: another Oscar winning short subject – The Old Mill that made memorable use of the multi-plane camera and Technicolor to create mood and atmosphere

Bottom: one of Disney's Silly Symphony title cards, proudly displaying the 'Color by Technicolor' logo that would become a trademark for Technicolor throughout the 1930s and 1940s.)



head L.B. Mayer that Technicolor would be unable to meet the film's May first general release date. It seemed that the novelty and all of Kalmus' early hard work had been for not. Technicolor was the proverbial late house guest that had worn out its welcome.

Kalmus launched into 'Process Number Three' in 1927 with renewed interest and a series of short subjects for MGM. Even so, studios continued to shy away from Technicolor for a full length feature until 1928's **The Viking** blazed onto the screen at a staggering \$325,000.



Overnight, it seemed the craze for color had caught on. MGM contracted Kalmus for color sequences in two of its biggest projects to date: **The Broadway Melody** (1929) and **The Desert Song** (1929). Both films' successes caught the attention of producer Jack L. Warner, who had seen his own profits rise that same year with the launch of 'the talkies' and had determined wisely that added profits could be made with the inclusion of sound and Technicolor. The net result for Kalmus was a flurry of requisites and ten months solid booking for work.





In Glorious Technicolor: Part II

MOVING PICTURES ARE 'LIVING' PICTURES NOW

By 1930, Technicolor was bursting forth with regularity inside movie houses across the country. **The Vagabond King**, **King of Jazz**, **Song of the West** and **Whoopee** all made excellent use of Process Number Three. However, with increasing regularity, Technicolor was also being exploited by producers eager to capitalize on the novelty but without the substance of plot to back their stories up.

The limitations of two-strip color notwithstanding (it could not photograph an effective blue or attractive green), Technicolor was fast becoming a gag in its chosen medium – something superficial to lure the paying customer in when everything else about the product spelled 'clunker.'

As a result, after a few short months of critical success, Technicolor experienced yet another downward spiral in its profits. Contracts were canceled and color photography acquired a negative connotation that continued to impact the





company's bottom line well into the middle of the decade. However, a minor reprieve was on the horizon.

To date, no animated cartoons had been produced in color – the general consensus being that cartoons were cheaply made and already popular as is. But Kalmus was not about to let general consensus interfere with his own progress. Armed with some test footage of his new and improved three-strip process - barely patented and unable to meet the demand, if any should arise from this latest development - Kalmus approached Walt Disney to use Technicolor for his popular **Silly Symphonies** cartoon series.

It was the beginning of an artistic friendship – one that so impressed Disney that for several years thereafter he held exclusivity on the Technicolor process for his animated short subjects. His first cartoon in Technicolor – **Flowers and Trees** (1932) won the Oscar for best Short Subject, as it garnered another statuette for Technicolor's latest achievement.

Still, Kalmus found it difficult to peddle color to major studios for live action films. The chief concern was cost. How much for color as opposed to black and white? Pioneer, a company founded by maverick Merian C. Cooper and millionaire Jock Whitney showed the first signs of legitimate interest in Technicolor for a feature film. On May 11, 1933, Whitney bought a block of stock in the company and agreed to 8 movies in color. The first, **La Cucaracha** (1934) did little to garner respect for the new three strip process.

The news of Whitney's investment spread throughout Hollywood, garnering curious interest in Technicolor. 20th Century-Fox toyed with adding color to the end sequence of **The House of Rothchild**, but shot their ending twice – once in Technicolor and once in black and white just in case public reaction to the addition of color proved negative. So too did Samuel Goldwyn license Technicolor briefly for one lavishly produced 'ice cream' production number in his otherwise all B&W movie; **Kid Millions**.

(Previous page: Errol Flynn takes dead aim in *The Adventures of Robin Hood* 1938, Warner Bros. radiant swashbuckler. Curiously, when Warner Bros. reissued the film in the mid-1940s, it reprinted the negative in B&W only. Lucille Ball attempts to tame a pack of 'cat girls' in *Ziegfeld Follies* 1949, MGM's all star lavish spectacle and salute to itself.

This page, top: Linda Darnell starred in *Forever Amber* 1947; a raunchy tale of palace intrigues that was cleansed by the censorship board prior to general release. Middle: Arlene Dahl coos 'I Love You So Much' to a group of dapper men in *Three Little Words* 1950.

Bottom: 'Take the picture!' Audrey Hepburn declares as she mimics the stance of 'Winged Victory' in the background of the Louvre for Stanley Donen's *Funny Face* 1957.)



Though the powers that be at Fox and Goldwyn were delighted when the color footage in both their films was well received by the critics, further contracts with Technicolor to produce 'whole' color features were not forthcoming. Then, came Rouben Mamoulian's **Becky Sharp** (1934) – a feature length movie based on Thackeray's *Vanity Fair* and a colossally expensive production for RKO Pathe. Unfortunately for all concerned, **Becky Sharp** was unfairly judged as inferior entertainment on several levels, despite critics citing Technicolor's vast improvements.

Conversely, a minor film - **Trail of the Lonesome Pine** (1936) became Technicolor's first profitable feature release. Still, the critics were unconvinced that color had played a part in the film's overall success. Rather, shrewd casting and plotting had culminated with Technicolor to produce marketable entertainment for the masses.

This assessment seemed to stick, especially after the general release of **The Dancing Pirate** – another colossal color flop for Pioneer. It was the last in a series. Fed up with his independent film making, Jock Whitney dissolved Pioneer and went into the business with fellow producer David O. Selznick instead.

(Top left and right: from *Snow White* 1938 to *Sleeping Beauty* 1959, Disney animated movies continued to utilize the cutting edge refinements in Technicolor to deliver a rich tapestry of cinematic fairytales, this latter example in Technirama – Technicolor's own patented widescreen process in competition with Cinemascope.)

Right: Doris Day strikes a gregarious pose for *Calamity Jane* 1953, the movie's answer to the overwhelming critical success of Broadway's *Oklahoma!* Bottom: Delilah (Hedy LaMarr surrenders Samson (Victor Mature) to the Roman guard in Cecil B. DeMille's lush Biblical epic *Samson & Delilah* 1949 for Paramount.)





Worse, - and despite the success of Selznick's original version of **A Star is Born** (1936), Technicolor's reputation within the industry was met by a growing refusal from established stars like Clark Gable, Jeanette MacDonald, Joan Crawford and Claudette Colbert to even consider appearing in color. Their artistic sensibilities were beyond reproach and if Gable didn't need color, who did? Bette Davis trumped them all - publicly calling Warner Brothers' foray into Technicolor "*tripe!*"

Then, in 1938, producer Pandro S. Berman agreed to break the color stalemate by inserting a dream sequence into the Astaire/Rogers musical **Carefree** at RKO. Tests were made and a production number devised. But, by the time Berman was ready to shoot the sequence RKO was on the verge of financial ruin. The studio couldn't risk an expensive flop. Hence, Fred Astaire and Ginger Rogers would have to wait eleven years to appear together in Technicolor - at MGM in **The Barkleys of Broadway** (1949).

END OF INTERNSHIP - 'In Glorious Technicolor'

"Now that we have fast film...I am sure that color is going to be more flattering than ever to women."

- Ernest Haller

The first major watershed in Technicolor's history proved to be a film that no one in Hollywood had faith in - except Walt Disney. For years, Disney had wanted to produce a feature length animated movie. Many in the industry considered Disney's dream not merely a dangerous gamble, but utterly foolhardy. The general consensus then was that no one would sit through a two hour 'cartoon.'

Undaunted, Disney borrowed against his own life insurance to finish his dream project; **Snow White and The Seven Dwarfs** (1937). Heralded as a masterpiece, and easily recouping its production costs, 'Disney's folly' (as the film had come to be known) revolutionized public and critical perceptions about animation. It also generated praise for Technicolor.

(Top: Charlton Heston as Moses in **The Ten Commandments** 1956. One of VistaVision's great selling points was that it utilized Technicolor to make its prints while Cinemascope used the grainier DeLuxe color process. Middle: Stewart Granger does battle with Mel Ferrer in **Scaramouche** 1952. Bottom: Gene Kelly, Debbie Reynolds and Donald O'Connor in the pre-title sequence from **Singin' In The Rain** 1952.)





One year later, two of Technicolor's finest examples to date had their theatrical premieres. The first - Warner Bros. **The Adventures of Robin Hood** (1938) was a glorious spectacle debuting resident heartthrob, Errol Flynn in his first color feature. The second offering – though not as widely remembered today – had more direct significance where Technicolor was concerned. Director William Wellman's **Men With Wings** (1938) was an ambitious movie about the early days of flight. It was also Wellman's third consecutive movie shot in Technicolor.

During production on his first color movie, **A Star is Born** (1936), the outspoken director had complained loudly about the cumbersome nature of Technicolor cameras. But with his latest release, Wellman had nothing but glowing praises to sing. *"I'll talk for hours about color,"* Wellman admitted, *"There's nothing like it...Color gives depth, perspective, reality. It's wonderful. But I'll try to be calm."*

Indeed, Technicolor's reputation within the industry was on the artistic mend. Major studio moguls that had once denounced color as mere gimmick were now eager to employ the process for their prestige pictures. Ironically, of all the studios that had dared dabble with color early on, Hollywood's most well appointed dream factory, Metro-Goldwyn-Mayer, had yet to embrace color and take the plunge.

Comfortable with their proficiency in monochromatic movie making, MGM had finally decided on Technicolor for the latest Nelson Eddy/Jeanette MacDonald musical; **Sweethearts** (1938). They also began negotiations on what would ultimately become one of the most beautifully photographed color films of all time: **The Wizard of Oz** (1939).

Technically, Oz is not a feature length color movie; its bookend Kansas sequences photographed in sepia. However, the other major screen achievement of that year – David O. Selznick's **Gone With The Wind** was a watershed for Technicolor. It also proved to be a colossal headache for Selznick. During the shoot, Natalie Kalmus' constant intervention as Technicolor's foremost color consultant managed to ruffle Selznick's artistic feathers on more than one occasion.

To be certain, Natalie Kalmus' involvement on most color films to date had been a major drawback for the organization. Difficult, opinionated and able to usurp any art director's creative authority in order to dictate her own esthetics on the use of various colors and textures incorporated into set design, Natalie Kalmus became a dreaded part of shooting movies in color.

Though she had secretly divorced her husband in 1921, Natalie continued to occupy his life for the next twenty years, a tenure that coincided with her hallowed place within the Technicolor organization as its chief color consultant. Indeed, for the next decade, Natalie would receive sole credit on virtually all movies shot in color. However, on **GWTW** a deal was eventually brokered between Technicolor and Selznick whereby Natalie would no longer be involved or even welcome on the set. She would indeed receive credit on **GWTW** as its' color consultant, but her daily presence would be felt no more.

HOLLYWOOD GOES TO WAR – Technicolor goes to work

It is perhaps a minor overstatement that WWII affected Technicolor's overall popularity. Yet, there is little to deny that the war years were a showcase for some of the most lavishly produced and stunningly photographed offerings yet to incorporate the 'new' process. Coinciding with the sudden rise and demand for pin-up girls, Technicolor made a showcase of radiant, sumptuous new beauties coming into their own during the early to mid 1940s.

Betty Grable in particular benefited from 20th Century-Fox's garish use of Technicolor in one glossy musical offering after the next. The flaming red locks of Maureen O'Hara and Rita Hayworth were admirably photographed in plot-thin Technicolor extravaganzas. With dubiously monikers like 'Queen of Technicolor' and 'Technicolor Tessie,' stars like Lucille Ball achieved a form of popularity directly linked to their film appearances in Technicolor. Even, Universal's minor sensation, Maria Montez, proved momentarily monumental in color by Technicolor.

In 1941, under the technological aegis of Dr. Leonard Troland, Technicolor debuted its' Monopack single film process. A mere three years later, Monopack became the standard for all color photography, outsourcing the three-strip process that had been the norm. Perhaps nowhere in Hollywood was this new Monopack more widely embraced and exploited than at 20th Century-Fox.

The studio had set a standard for achieving artistry through color with Rouben Mamoulian's **Blood and Sand** (1941) a legacy that would endure throughout the war years as Fox produced many films with award-winning color photography including **The Black Swan** (1942), **Wilson** (1944), **Leave Her To Heaven** (1945) and **Forever Amber** (1946) – the latter, utilizing a special lamp that produced a hard streak of light to create single shadows and advance the mood of color photography for dramatic effect.

(Previous page left: June Allyson and the Blackburn Twins from *Words & Music* 1948. Right: the finale to *An American In Paris* 1951. This page, top: George C. Scott as Patton 1970. Middle: Barbara Streisand gives it her all in *Hello Dolly!* 1969. Bottom: the beginning of one of the most famous jump cuts in all movie history; Peter O'Toole blows out a match in *Lawrence of Arabia* 1962. The shot cuts to a sunrise on the desert.)





(In the 1980s, Technicolor's processing produced a more subtle palette of colors for such films as Steven Spielberg's *E.T. The Extra Terrestrial* and Richard Attenborough's *Gandhi* – both released in 1982. However, these films began to fade at a considerably faster rate than their 3-strip predecessors.)

But without a doubt, the most impressive example of Technicolor to date came not from Hollywood, but from Britain with the release of Jack Cardiff's **Black Narcissus** (1948) – a moody, stark and surreally beautiful drama made at Elstree Studios. The trend toward British imports making a splash in North America continued with **The Red Shoes** (1948) – a brilliantly conceived fantasy/melodrama that elevated the popularity of ballet dancing on film.

In spite of these glowing contributions to color, and Technicolor's diligence in producing high quality prints for all the major studios, the company became the subject of an anti-trust suit filed by the U.S. Government in 1948 that charged Technicolor had a monopoly. True, Kalmus had never been one to bow to studio pressure for 'rush jobs' in making his prints – preferring quality over quantity as his company policy. Also, Technicolor film stock was specifically designed for use only in Technicolor cameras. But the stalemate for 'on demand' printing was hardly deliberate or designed to illicit bottleneck control over any studio's output. Also, Kalmus had, for some time planned to perfect a new color stock that would be adaptable in standard cameras.

Ironically, it had not been for lack of funding, research or timing that Technicolor never achieved this latter goal. But even under its current restriction in camera technologies, Technicolor did not have a true 'monopoly' on color processing. In fact, two inferior rivals – Cinecolor and Trucolor had been readily in use and in competition with Technicolor throughout the war years. Nevertheless, the anti-trust suit against Technicolor dragged on for three years.

In 1949, Technicolor was dealt a more prominent blow from Eastman Kodak's debut of a single strip color negative. Eastman's process was not only faster in printing than Technicolor – it was cheaper. Many in the industry were quick to predict a swift end to Technicolor's supremacy. But the conversion to other color methods was not as pervasive or instant as the critics surmised. Instead, Technicolor continued to be the preferred process in Hollywood, until 1953's **Foxfire** for Universal.

In 1955, Technicolor adapted its three-strip negative to the more preferred and pliable single strip process. But the results were hardly complimentary to the advent of widescreen projection via Cinemascope and VistaVision. In fact, though tonality and color rendering remained superb, the new printing process lacked considerably in sharpness and definition. In an attempt to rectify this shortcoming, Technicolor introduced its own anamorphic process – Technirama: superior and utilized by Walt Disney for **Sleeping Beauty** in 1959.

That same year, Herbert Kalmus – who had toyed with the idea of retiring since the mid-1940s – decided it was time to step down as the company's chief operating officer. At 78, he had seen Technicolor grow from a modest technological gimmick into the industry standard.



NEW HORIZONS – OLD SLUMPS

With his appointment as chief executive Technicolor's incoming chairman, Patrick J. Frawley began an ambitious campaign to diversify and expand the company's color processing platform. In truth, with the retirement of its patented three strip Technicolor cameras in the mid-fifties – now, collecting dust as relics of the Smithsonian – Technicolor's responsibilities within the industry were compartmentalized as laboratory and processing facilities only, with satellite offices housed in London and Rome.

Frawley expanded Technicolor's operations to incorporate the processing of amateur 8 and 16mm film stocks. He also established a link for development with the National Aeronautics and Space Administration, the Air Force, the Department of the Interior and the Government of West Germany.

To some extent, Frawley's diversification proved profitable. Apart from the company's continued involvement in processing such color films as **West Sides Story** (1961), **Lawrence of Arabia** (1962) and **My Fair Lady** (1964), Technicolor also became active in printing black and white movies. Frawley next announced that Technicolor would become active in converting full color television prints from color tapes – a revolutionary breakthrough made possible by the company's subsidiary division: Vidtronics.

Ironically, with a decline in the studio system and dwindling output of major features during the mid-60s, Technicolor suffered a substantial blow to its bottom line. For all of Frawley's diversification, his new forays away from Hollywood had remained mere sidelines to the company's main staple - mass orders for prints of major motion pictures. Deprived of these orders by a more cautious and independent Hollywood, Technicolor's dye transfer process became uncompetitive and the company's financial future more precariously perched than ever before.



By 1970, Technicolor's balance sheet had dipped into the red. A new chairman, Morton Kamerman entered the picture, phasing out the old labor intensive dye transfer negative process, selling off its former technology and equipment to China and closing Technicolor's flagship Hollywood plant within the year. The turnaround may have been drastic, but arguably it was also necessary to restore the company to profitability.

(Top: examples of today's Technicolor – Russell Crowe as Maximus, a Roman general reduced to the rank of an enslaved warrior in Ridley Scott's *Gladiator* 2000. Middle: an ensemble publicity still to promote the release of Disney's *The Lion King* 1994. Bottom: another publicity still for Disney/Pixar's release of *The Incredibles* 2004.



The alliance between Technicolor and the Walt Disney Studios reaches far back when Walt first began producing Silly Symphonies and Mickey Mouse short subjects using Technicolor's patented 3-strip process. Ironically, while most of Hollywood had balked at using Technicolor, Disney helped pioneer the company's success.)

RESTRUCTURING – the other end of the rainbow?

In 1982, Technicolor was privatized with its board of directors' complicity; acquired by MacAndrews & Forbes. Under new management, Technicolor divested itself of all Frawley's sideline ventures, concentrating solely on film processing and videocassette duplication. The move was perfectly timed.

The old Hollywood strategy of test marketing new films through 'limited release' had given way to a policy of immediate nationwide distribution, resulting in a net increase of orders for more theatrical prints. Furthermore, the video revolution, with its private collectors clamoring to own their favorite filmic memories on VHS and Beta created a groundswell of demand for video mastering that by the end of 1983 was averaging approximately 50,000 units per year. By 1995, that number dramatically increased to over 200 million units per annum.

In the mid-90s, Technicolor embarked upon an aggressive campaign into new digital technologies designed for restoration and preservation of older movies; a shrewd move cautiously tested nearly a decade earlier with the limited release of a restored **Becky Sharp**. Over the next ten years, studios would begin to realize the importance of these early efforts.

But in the early 80s, film directors, private collectors and fans of the home video market had already noticed an alarming anomaly plaguing their favorite films. Movies as young as six years from their original release had already begun to degrade in color fidelity. Films of the 1950s shot on Eastman and DeLuxe stock had turned a chalky pink.

Technicolor's own revamped dye transfer process from this vintage was not above reproach. In 1980, Steven Spielberg noted that his, **Jaws** (1976) was among the films that had already lost a considerable amount of resiliency in its blue register – rendering the waters of his horror classic a muddy grayish brown. The cry from the industry was slowly gaining momentum. Something had to be done.

Enter Tom Epley as Technicolor's new chairman in the early 1990s, advancing the company's prestige and profitability through development of CD and DVD manufacturing and restoration facilities – the latter becoming the biggest generator of revenues for Technicolor. Their Home Entertainment Services division was helmed by Lanny Raimondo who succeeded Epley as Technicolor's CEO in 1998.

Most recently, Technicolor has expanded into the video game industry; entering into a multi-year agreement with Microsoft to be the primary replicating facility for its X-Box console. At last count, Technicolor has been responsible for the production and distribution of approximately 100 million discs worldwide.

In 2001, Technicolor was acquired by Thomson – a multimedia conglomerate that helped advance the company's involvement in the installation of digital cinema systems across North America. Under Thomson's creative wing, Technicolor continues to grow that offshoot of its theatrical interests as the leading partner in the media and entertainment industry. Hence, Thomson has managed yet another fascinating reprieve in the history of Technicolor – a name that will probably continue to resonate with the paying customer for many decades to follow.

(Right: Dustin Hoffman proudly salutes in this poster campaign art for *Tootsie* 1982. Bottom: Technicolor's latest production facilities.)

