


I'm not robot  reCAPTCHA

Continue



Kamasutra 3DDirectorRupesh PaulProduced byvenkatesh pai bolwarSagar ThackerHWritten byRupesh PaulStarringAndria D'SouzaMakarand DeshpandeMusic bySaachinSreejithMuhammad Ali (background score) CinematographySapan Narula (2D)Ratheesh KG (3 D) Edited by Jayjay DevlokhaProductioncompany Rupesh Paul Productions LimitedRelease Date 2013 (2013) (Cannes Film Festival) CountryIndiaLanguageEnglish Kamasutra 3D is a 2013 Indian English 3D erotic drama film written and directed by Rupesh Paul. The film was announced at the 2012 Cannes Film Festival by Rupesh Paul, the film's director, following the premiere of his film *Saint Dracula 3D* at the festival. The first look at *Kamasutra 3D* was presented at the NFDC Film Bazaar on November 22, 2012, which took place on the sidelines of the 2012 India International Film Festival (IFFI) in Goa. The *Kamasutra 3D* - Video of the photo shoot with Sherlin Chopra was published on January 19, 2013. The *kamasutra 3D* production is produced under the house of Rupesh Paul Productions Limited and is represented by G J Entertainments. The story was written by the director. The film is co-produced and developed by Sohan Roy, and Dr. George John is an executive producer. Rupesh Paul said: 3D seems to be the best format for depicting classical erotica, but until recently it hardly experimented. It stayed as a tool to give the biggest boost to horror movies. No one predicted that Chinese stereoscopic would become a major hit. In fact, he's from the assembled 3D movie *Avatar*. In the film, we try to give an additional dimension to the sexual positions described in the ancient treatise on the art of love. Later, in June 2016, he went against it and declared, My film was mistaken as erotica, but it's a war movie. Starring Milind Gunaji as the Mighty King of King Malhan as Warrior/Prince/Naga Sadhu Tumul Balyan as Warrior/ Naga Sadhu Makarand Deshpande as King Malina Kahn as Princess Sushmita MookHerjee as the queen Gajendra Chauhan as Kamashastra Guru Mohan Kapoor, as a disciple of Kamashastra Guru Amit Biel, as Administrator Saira Khan Kristna Saikia, as Japanese mystic queen Jay Acharya, as Prince-Warrior First Love (Flashback) Mohit Keswani – Mighty King (Flashback) Andriya D'Souza - Arab queen Sunil Bob Manoj Verma Abha Paul as a warrior / Naga Sadhu Trivia Director Rupesh Paul decided to replace Sherlin Chopra, after Chopra uploaded a video clip for a photo shoot of the film on his YouTube channel, without seeking his permission. He wanted to replace her with Eva Longoria or Mila Kunis. Chopra later apologized to him in writing, saying she would not say or write anything about the film without the producers' consent. On February 9, 2014, Paul filed a defamation lawsuit against Chopra, alleging that The actress abused him on Twitter. On February 22, Paul filed another complaint against Chopra seeking bail. By March 2014, however, both sides had dropped the lawsuits, publicly stating that they had decided to drop the misunderstanding. In June 2016, Chopra, after being asked about the film after a long silence, told the media that she was not involved with the movie. She stated that this was not her film and wished the team all that. See also *Kama Sutra: A Tale of Love* *Tales of Kama Sutra: Perfume Garden* *Tales kama Sutra 2: Monsoon* *Links Beyerlin Chopra in KAMASUTRA 3D n Oscar 2014* . *Glamsham*. December 21, 2013. Received on February 17, 2014. b c *Kamasutra 3D is not my movie: Sherlin Chopra*. *Hindustan Times*. August 16, 2016. Received on October 19, 2016. RUPES PAVEL IS THE KAMASUTRA 3D. Archive from the original on June 4, 2012. Received on June 4, 2012. Sherlin Chopra in *Kamasra 3D: First Look* at the Goa Cinema Bazaar. *Hindustan Times*. November 22, 2011. Received on April 20, 2013. *Kamasutra 3D Official Trailer: Release Dates* May 2014. *Abtollywood.com* on November 27, 2013. Received on February 10, 2014. *Kamasutra 3D producer Sohan Roy*. Dr. George John honor. *Pardaphash.com*. received on February 10, 2014. "Kamasutra 3D: Will Sherlin Chopra be replaced?". Received on December 9, 2017. Bhatnagar, Rohit (June 25, 2016). After 3 years, *Kamasutra 3D* finally see the light of the author. The Asian century. Received on October 15, 2016. Sherrienne Chopra tweets. Just found out that Makaran Deshpande was signed to a key role in *Kamasutra 3D*. In.tweetwood.com archive from the original on June 22, 2013. Received on April 20, 2013. Sherlin Chopra from *Kamasutra 3D*. *Indiatoday.in*. received on February 12, 2014. Sherlyn Chopra back in *Kamasutra 3D?*. *Hindustan Times*. February 26, 2013. Received on February 1, 2014. "Kamasutra 3D' director files defamation case against Sherlin Chopra". *The Times of India*. Received on February 10, 2014. Rupesh is surprised by Sherlin's complaint; looking for pre-emptive bail. *The Times of India*. February 22, 2014. Received on March 1, 2014. Rупesh Paul and Sherlin Chopra forget the differences. *The Times of India*. March 10, 2014. Received on April 1, 2014. *Kamasutra 3D's* external links to IMDb are derived from 2This article about movies that give the illusion of depth. For 2D movies created using software for 3D modeling, see *movies created using stereophotography*, see *The film made in three dimensions* Part series onFilmmaking Development Step Sketch Film Treatment Film Funding Film Budgeting Green Light Pre-Production Breakdown Scenario Breakdown Storyboard Production Board Production Band Of The Day Of Production Schedule One Liner Schedule Shooting Schedule Production Cinematography Shooting Shooting Scenario Film Inventory Report Daily Production Report Daily Performance Report Daily Progress Report Daily Journal Sound Magazine Report Cost Report After Production Film Editing Re-recording Sync Sound Music Special Effects (soundvisual) Negative Costs Distribution Distribution Movie Release (Broad-Click) Roadshow Related Topics Movie Story FilmOgraphy Guerrilla Film Production Glossary See also *The Film Crew Hook Pitch Screenwriting Screenplay Movie Portaitve 3D movies* are made to give the illusion of three-dimensional strength, usually with special viewing devices (glasses worn by spectators). They have existed in one form or another since 1915, but have been largely relegated to a niche in the film industry due to the expensive equipment and processes needed to produce and display a 3D film, as well as the lack of a standardized format for all segments of the entertainment business. However, 3D movies were notable in 1950s American cinema and then experienced a worldwide renaissance in the 1980s and 1990s, driven by IMAX high-end theaters and Disney themed venues. 3D movies became increasingly successful throughout the 2000s, peaking with the success of *Avatar's* 3D presentations in December 2009, after which 3D movies declined again in popularity. Some directors have also adopted more experimental approaches to 3D filmmaking, most notably the famous author of the film *3x3D* (Jean-Luc Godard). History This section needs additional quotes to verify. Please help improve this article by adding quotes to reliable sources. Non-sources of materials can be challenged and removed. (December 2009) (Learn how and when to delete this template message) Before the film the main components of the 3D film were introduced separately between 1833 and 1839. The strobe animation was developed by Joseph Plateau in 1832 and published in 1833 as a strobe disk, which he later called a phytascop and became better known as phenacistica. Around the same time (1832/1833) Charles Wheatstone developed the stereoscope, but until June 1838 it did not make it public. The first practical forms of photography were introduced in January 1839 by Louis Daguerre and Henry Fox Talbot. The combination of these elements in animated stereoscopic photographs may have been conceived early on, but for decades it has not been possible to capture the movement of real-time photographic recordings due to the long exposure time required for the light-sensitive emulsions that have been used. Charles Wheatstone received Henry Fox Talbot produced some pairs of calotype for stereoscope and got october 1840. Several more experimental stereoscopic photographs were taken before David Brewster introduced his stereoscope with lenses in 1849. Wheatstone also approached Joseph Plateau with an offer to combine stereoscope with stereoscopic photography. In 1849, Plateau published about this concept in an article about several improvements made in his phnoscop and proposed a stop-motion technique that would include a series of photos of specially made plaster figurines in various poses. The idea came to Jules Duboscq, a tool manufacturer that has already projected the *Fantascop* Plateau, as well as the *Stereoscopes of Wheatstone and Brewster*. In November 1852, Duboscq added the concept of his stereoscope, ou B'oscopie, to his stereoscope. The production of the images proved very difficult, as the photographic sequence had to be carefully constructed from individual third images. The bioscope has not been successful, and the only waiting disc, without a device, is in the collection of Joseph Plateau of the University of Ghent. The drive contains 12 album pairs of images of the machine in motion. Most of the other early attempts to create movies were also aimed at incorporating stereoscopic effects. In November 1851, Antoine Claudet stated that he had created a stereoscope that showed people in motion. Initially, the device showed only two phases, but over the next two years Claudet worked on a camera that would record stereoscopic pairs for four different poses (patented in 1853). Claudet found that the stereoscopic effects did not work properly in his devices, but believed that the illusion of motion was successful. Johann Nepomuk Herrmakh published an article about his Stereoscroscope. His first idea is to create animated images in 3D involving sticking pins in a strobe disk in a sequence that will show the pin moving further into the cardboard and back. He also developed a device that will feed images of steam from two strobe discs into one lenticular stereoscope and a vertical precursor to the zoetrope. On February 27, 1860, Peter Hubert Desbignes received the British patent No. 537 for 2B monocular and stereoscopic variations of cylindrical strobe devices. This included a version that used an endless series of photos running between two coils, which were periodically illuminated by an electric spark. Desvignes' Mimoscope received a honorable mention for the ingenuity of construction at the 1862 International Exhibition in London. He could exhibit drawings, models, single or stereoscopic photographs to revive animal movements, or movement techniques, showing various other illusions. Desvignes used models, insects and other objects, not photographs, with success. Horizontal slits (as in Chernak's stereoscope) have significantly improved the look, with both eyes, eyes. Photos. In 1861, American engineer Coleman Sellers II was granted U.S. Patent No. 35,317 for a kinematoscope, a device that exhibited stereoscopic images to make them represent objects in motion. In a statement he said: This is often done with plane photos, but never was, with stereoscopic photos. He used three sets of stereoscopic photos in sequence with some duplicates to regulate the flow of simple repetitive motion, but also described the system for a very large series of photos of complex motion. On August 11, 1877, Daily Alta announced Edward Muybridge and Leland Stanford's project to produce sequences of photographs of a running horse with 12 stereoscopic cameras. Muybridge has had extensive experience with stereo photography and has already taken instant photos of Stanford's occident horse running at full speed. He eventually managed to film the proposed sequences of running horses in June 1878, with stereoscopic cameras. In 1898, Muirbridge claimed that shortly thereafter placed the photos in two synchronized zoetropes and placed the mirrors as in The Wheatstone Stereoscope, resulting in a very satisfactory reproduction of a clearly solid miniature horse, a lynx, and another galloping horse. Thomas Edison demonstrated his phonograph on November 29, 1877, after previous announcements of the device for recording and sound playback were published at the beginning of the year. An article in *Scientific American* concluded: It is already possible, with the help of ingenious optical tricks, to throw stereoscopic photos of people on screens in full view of the audience. Add a talking phonograph to fake their voices, and it would be hard to bear the illusion of a real presence much further. Wordsworth Donisthorpe announced in nature's January 24, 1878 edition that he had advance that conception: By combining the phonograph with the kinesigraph I will undertake not only to produce a telling image of Mr. Gladstone who, with still lips and an unchanged expression positively recite his last anti-Turkish speech in his own voice and tone. Not only that, but the sheer size of the life of the photo should move and gesticulate exactly as it did when making speeches, words and gestures appropriate, as in real life. Dr. Phipson repeated this idea in a French photo magazine, but renamed the device Kinetscope to reflect the purpose of the viewing, not the recording option. This was picked up in the United States and discussed in an interview with Edison later this year. Neither Donistorp nor Edison's later works were stereoscopic. Early patents and tests in the late 1890s British film pioneer William Freese-Green filed a patent for the 3D process. In his patent, two films were projected side by side on the screen. Viewer through the stereoscope to converge two images. Because of the obsessive mechanics behind this method, theatrical use was not practical. Frederick Eugene Ives patented his stereo camera installation in 1900. The camera had two lenses combined 1 3/4 inches (4.45 centimeters) apart. On June 10, 1915, Edwin S. Porter and William Waddell presented the tests to the audience at the Astor Theater in New York City. In the red-green anaglyph, the audience was presented with three drum tests, which included rural scenes, test shots of Marie Doro, a fragment of John Mason playing a series of excerpts from the Jim Penman film (a film released by famous Lyaski players in the same year, but not in 3D), oriental dancers and a reel of frames of Niagara Falls. However, according to Adolf Sukor in his 1953 autobiography, *The Public Is Never Wrong: My 50 Years in the Motion Industry*, nothing was produced in the process after these trials. 1909-1915. Alabastra and Kinoplasty By 1909, the German film market was hit hard by overproduction and too much competition. German film mogul Oscar Messter initially got great financial success with Tonbild's synchronized sound films of his biophon system since 1903, but the films are losing money by the end of the decade and Messter will stop Tonbild production in 1913. Producers and exhibitors searched for new attractions of the film and invested, for example, in colorful images. The development of stereoscopic cinema seemed like a logical step to lure visitors back to the cinemas. In 1909, German civil engineer August Engelsmann patented a process that projected on filmed performances in physical decor on a real stage. Shortly thereafter, Messter obtained patents for a very similar process, probably by arrangement with Engelsman, and began selling it as *Alabama*. The performers were brightly dressed and brightly lit while filming on a black background, mostly miming their singing or musical skills or dancing for about four minutes of pre-recorded phonographs. The film's recordings will be projected from below to appear as a about 3D inch figure on a glass glass in front of a small stage, in an installation very similar to the ghost illusion of Pepper, which has offered a popular stage trick technique since the 1860s. The glass window could not be seen by the audience, and the projected figures seemed to be able to move freely around the stage in their virtual material and realistic appearance. The brightness of the figures was necessary to avoid end-to-end spots and make them look like alabaster sculptures. To adapt to this appearance, several films starred Pierrot or other white clouds, while some films were probably hand-colored. Although Alabastra was well received by the press, Messter released several titles, hardly promoted them and abandoned it altogether a few years later. He believed that because of its need for special theatres rather than widely available movie screens, he did not like the fact that he seemed suitable only for stage productions, not for natural films. However, there were many imitators in Germany, and Messter and Engelsman still, along with the American can artist Frank Goldsall, created a short-lived version called *Phantomo* in 1914. In 1911, Karl Juhash and Franz Haushofer opened the Kinoplasty Theatre in Vienna. Their patented system was very similar to the Alabastra, but projected figures in the size of life from the wings of the stage. With much higher ticket prices than a standard cinema, it has focused on middle-class audiences to fill the gap between low-brow movies and high-end theater. Audiences reacted enthusiastically, and by 1913 there were reportedly 250 theatres outside Austria, France, Italy, the UK, Russia and North America. However, the first Kinoplastikon in Paris began in January 1914, and the premiere in New York took place at the Hippodrome in March 1915. In 1913, Walter R. Booth made 10 films for the UK Kinoplastikon, presumably in collaboration with Cecil Hepworth. Theodore Brown, a licensee in the UK, also patented the option with front and back projection and reflected decor, and Goldsall applied for a very similar patent only 10 days later. Further development and exploitation were probably halted by the First World War. Alabastra and Kinoplasty were often advertised as stereoscopic and screenless. Although the effect was in fact heavily dependent on the projection of the glass screen and the films were not stereoscopic, the show seemed really three-dimensional, as the figures were clearly separated from the background and practically appeared inside a real, three-dimensional stage area with no visible screen. In the end, longer (multi-camera) films with the plot of the arc proved to be the way out of the crisis in the film market and supplanted previously popular short films, which are mainly aimed at entertaining people with tricks, gags or other short variety and novelty attractions. Sound film, stereoscopic film and other new techniques were relatively cumbersome to team up with multiple drums and were abandoned for a while. Early stereoscopic film production systems (until 1952) Fairall's 1922 3D camera Fairall Auditorium in special glasses watch a 3D stereoscopic film at Telekinea on the South Shore in London during the 1951 UK Festival. The earliest confirmed 3D film shown to an out-of-home audience was *The Power of Love*, which premiered at the Ambassador Hotel Theatre in Los Angeles on September 27, 1922. The camera was the product of the film's producer Harry K. Fairall and cameraman Robert F. Elder. He was double stripe in black and white, and single-lane color anaglyphic release prints were produced color film invented and patented by Harry C. Fairall. One projector can be used to display the film, but anaglyph glasses have been used for viewing. The camera system and special color printed film received U.S. patent No. 1,784,515 on December 9, 1930. After previewing for exhibitors and the press in New York, the film fell out of sight, apparently unbooked exhibitors, and is now considered lost. In early December 1922, William Van Doren Kelly, inventor of the Prizma color system, cashed in on the growing interest in 3D films started by the Fairall demonstration, and shot the footage using a system of cameras of his own design. Kelly then struck a deal with Samuel Roxy Rothafel to premiere first in his series of Plasticon Shorts titled *Films of the Future* at the Rivoli Theatre in New York. Also in December 1922, Lawrence Hammond (later the inventor of Hammond's body) premiered his Television system, which was shown in trade and the press in October. The TV viewing was the first variable frame of the 3D system seen by the public. Using left and right eye prints and two interconnected projectors, the left and right frames are alternately projected, each pair shown three times to suppress the flicker. The viewing devices attached to the armrests of the theater seats had rotating shutters that worked in sync with the shutters of the projector, giving a clean and clear stereoscopic result. The only theater that Television is known to have established was the Selwyn Theatre in New York, and only one show was ever presented with it: a group of short films, an exhibition of live 3D shadows, and M.A.R.S., the only feature of THE TV Review. The show ran for several weeks, apparently doing good business as a novelty (M.A.R.S. itself received bad reviews), but Television was never seen again. In 1922, Frederick Eugene Ives and Jakob Leventhal began producing their first stereoscopic shorts, made within three years. The first film, entitled *Plastigrams*, was distributed nationally by Educational Pictures in a red-and-blue anaglyph format. Ives and Leventhal then released the following stereoscopic shorts in *The Stereoscopic Series* released by Pathé Films in 1925: *Zoezy* (April 10), *Luna-cyl* (May 18), *Taxi on the Run* (December 17) and *Oy* (December 17), September 22, 1924 Luna-sil was rebuked in the De Forest Phonofilm sound system. In the late 1920s and early 1930s there was little interest in stereoscopic images. In Paris, Louis Lumiere shot his stereoscopic camera in September 1933. In March of the following year, he exhibited a remake of his 1895 short film *L'Arrive du Train*, this time in anaglyphic 3D, at a meeting of the French Academy of Sciences. In 1936, Leventhal and John Norling were hired on the basis of their frames for the shooting of the MGM audiocopy series. The prints were Technicolor's red-green red-green format, and narrated by Pete Smith. The first film, *Audiocopies*, premiered on January 11, 1936, and premiered *New Audiocopies* on January 15, 1938. *Audiocopies* was nominated for an Oscar in the category of Best Short Theme, a novelty in 1936. With the success of two Audiocopies films, MGM released another short in anaglyph 3D, another Pete Smith specialty called *Third Dimension Murder* (1941). Unlike its predecessors, this short was filmed with a studio camera setup. Technicolor's prints were in red-blue anaglyph. Short is notable for being one of the few live-action performances of frankenstein monster, as intended by Jack Pierce for Universal Studios outside his company. Although many of these films were printed on color systems, none of them were actually in color, and the use of color printing was only to achieve anaglyph effect. Introducing *Polaroid* While studying at Harvard University, Edwin H. Earth conceived the idea of reducing glare by polarizing light. He took a leave of absence from Harvard to set up a laboratory and by 1929 had invented and patented a polarizing sheet. In 1932, he introduced *Polaroid J* Sheet as a commercial product. While its original intention was to create a filter to reduce glare from car headlights, Earth did not underestimate the usefulness of its newly named *Polaroid* filters in stereoscopic presentations. In January 1936, Land gave the first demonstration of *Polaroid* filters in conjunction with a 3D photograph at the Waldorf-Astoria. The reaction was enthusiastic, and he followed it with an installation at the New York Museum of Science. It is not known which film was launched for the audience at this show. However, the use of *Polaroid* filters meant a completely new form of projection. Two prints, each of which has a right or left view, had to be synchronized in the projection using an external selsin motor. In addition, polarized light will be heavily depolarized by a matte white screen, and only a silver screen or screen from other reflective material will correctly reflect individual images. Later that year, the feature, *Nozze Vagabonde* appeared in Italy, and then in Germany there is no zum Greifen (you can almost touch it), and again in 1939 with *Sechs Medel* of Germany *Rollen ins Wochenende* (Six Girls Drive Into the Weekend). The Italian film was shot with the camera Gualtierotti; two German productions with a zeis camera and a Vierler shooting system. All of these films were first on display using *Polaroid* filters. In Germany, the company has been producing glasses on a commercial basis since 1936; they were also independently made around the same time in Germany by E. K'emann and J. Mahler. In 1939, John Norling starred in *Tune With first commercial 3D film using Polaroid's* necessary. This short premiere took place in 1939 at the World's Fair in New York and was created specifically for the Chrysler Motors Pavilion. In it, the full 1939 Chrysler Plymouth magically put together, set to music. Originally in black and white, the film was so popular that it was shot again in color over the next year at a fair called *New Dimensions*. In 1953 it was reissued by RKO as *Motor Rhythm*. Another early short that used the *Polaroid 3D* process was 1940s *Magic Movies: Thrills For You* produced by Pennsylvania Railroad Co. for the Golden Gate International Exhibition. (quote needed) Producer John Norling, it was filmed by Jacob Leventhal using his own installation. It consisted of shots of various kinds that could be seen from Pennsylvania Railroad trains. In the 1940s, *World War II* prioritized the military application of stereoscopic photography, and it once again faded into the back burner in the minds of most manufacturers. The Golden Era (1952-1954) What fans consider the golden era of 3D began in late 1952 with the release of the first color stereoscopic feature, *Bwana Devil*, produced, written and directed by Arch Oboler. The film was shot in *Natural Vision*, a process that was created and controlled by M.L. Gunzberg. Gunzberg, who built the installation with his brother, Julian, and two other partners, bought it without success in various studios before Oboler used it for this feature, which went into production with the title, *Lions of Gulu*. The critically prepared film, however, was highly successful with the audience due to the novelty of 3D, which increased Hollywood's interest in 3D in a period that saw a decline in box office fees. As with almost all the features made during this boom, *Bwana Devil* is projected onto a double strip with *Polaroid* filters. In the 1950s, the familiar disposable cardboard anaglyph glasses were mostly used for comics, two dan Sonny's operations shorts and three shorts produced by Lippert Productions. However, even Lippert shorts were available in double stripe format as an alternative. Because the functions used two projectors, the limit of the film capacity loaded on each projector (about 6,000 feet (1,800 m), or an hour's worth of film) meant that intermission was necessary for each feature film. Often intermission points were recorded in the script at the main plot point. During Christmas 1952, producer Saul Lesser quickly premiered a double-band showcase called *Stroy Techniques* in Chicago. Lesser acquired the rights to five two-lane shorts. Two of them, now is the time (to wear glasses) and around, were directed by Norman McLaren in 1951 for the National Film Council of Canada. The other three films were produced in the UK for Great Britain in 1951 by Raymond Raymond. It was a solid explanation, the *Royal River* and the *Black Swan*. James Mag was also the first pioneer in the 3D craze. Using his 16mm Bolex 3D system, it premiered its *Trirama* program on February 10, 1953, with four shorts: *Sunday In Stereo*, *Indian Summer*, *American Life*, and *This Is Bolex Stereo*. This show is considered lost. Another early 3D film during the Boom was Lippert Productions *Short*, a day in the country, narrated by Joe Besser and composed mostly of test shots. Unlike all the other Lippert shorts, which were available in both double stripes and anaglyph, this production was released only in an anaglyph. April 1953 saw two groundbreaking features in 3D: *The Man of Columbia* in the Dark and Warner Bros. *House of Wax*, the first 3D feature with stereophonic sound. The house of wax, outside Cinerama, was the first time many American viewers heard a recorded stereophonic sound. It was also a film that typecast Vincent Price as a horror star as well as King 3-D after he became an actor to star in most 3D features (others were Mad Man, Dangerous Mission, and Son of Sindbad). The success of these two films proved that major studios now have a method of getting moviegoers back to theaters and away from televisions, which cause a steady decline in attendance. Walt Disney Studios entered 3D with its May 28, 1953, release of the melody that accompanied the first 3D western, *Columbia Fort T* at the opening in Los Angeles. He was later shown at Disneyland's Fantasyland Theatre in 1957 as part of a program with another Disney short *Work for Peanuts*, entitled, 3-D Jamboree. The show was hosted by the Mousketeers and was in color. Universal-International released its first 3D feature on May 27, 1953, *It Came from Outer Space*, with stereophonic sound. After that was Paramount's first feature, *Sangari* with Fernando Lamas and Arlene Dahl. Columbia has released several 3D westerns produced by Sam Katzman and directed by William Castle. The castle would later specialize in various technical tricks in the theater for such Colombian and allied feature artists as 13 Ghosts, Haunted Hill House, and Tingler. Columbia also released the only farce comedy conceived for 3D. Three Stooges starred in *Spooks and Forgive My Backfire*: The dialect comic Harry Mimmo starred in *Work with the Hatch*. Producer Jules White was optimistic about the possibilities of 3D, as it applies to slap (with pies and other projectiles aimed at the audience), but only two of his stereoscopic shorts were shown in 3D. Down the Hatch was released as a regular, flat film. (Columbia has since printed *Down The Hatch* in 3D for film festivals.) John Ireland, Joan Dru and Macdonald Carey starred in a color production by Jack Broder's Hannah Lee, which premiered on June 19, 1953. The film was directed by Ireland, sued Broder for *Counter* -sundered, alleging that Ireland went to production costs with the film. Another famous entry in the golden era of 3D was the 3 Picture Productions produced by Robt Monster. The film is said to have been written an hour later by screenwriter Wyatt Ording and shot within two weeks on a meagre budget. (quote needed) Despite these flaws and the fact that the crew had no experience with the newly built camera setup, luck was on the filmmaker's side, as many find the 3D photos in the film well shot and aligned. Robt Monster also has notable scores by the time up-and-coming composer Elmer Bernstein. The film was released on June 24, 1953, and came out with a short *Stardust* in *Your Eyes*, which starred the nightclub comedian, Slick Slavin. Citation Necessary 20th Century Fox released its only 3D feature, *Inferno* in 1953, starring Rhonda Fleming. Fleming, who also starred in *These Redheads* from Seattle, and Givaro, shares the place for the actress to appear in the most 3D features with Patricia Medina, who starred in *Sangari*, *The Ghost of Rue Morgue* and *Tahti Durnin*. Darny F. zak shows little interest in stereoscopic systems, and at that moment was preparing for the premiere of the new widescreen cinema system CinemaScope. The first decline in theatrical 3D fascination began in August and September 1953. Factors causing this decline were: two prints had to be projected simultaneously. The prints had to remain exactly the same after the repair, otherwise the synchronization would be lost. Sometimes it was necessary for two projectionists to work properly. When prints or shutters become out of sync, even for a single frame, the picture became virtually unobserved and took into account headaches and eye strain. The required silver projection screen was very directional and caused the side seating to be unusable with both 3D and regular movies, due to the angular blackout of these screens. Later films that opened in wider locations often premiere flats for this reason (such as *Kiss Me Kate* at Radio City Music Hall). (quote is necessary) Mandatory intermission was necessary for the proper preparation of the projectors of the theater for the screening of the second half of the film. Because projection booth operators were often sloppy, even at preview screenings of 3D films, trade and newspaper critics claimed that some films were their eyes. (quote needed) Saul Lesser tried to follow *Stroy Techniques* with a new showcase, this time five shorts that he himself had prepared. The project was to be called 3-D Stupidity and was to be distributed by RKO. Unfortunately, due to the financial and a general loss of interest in 3D, Lesser canceled the project during it in the summer of 1953, making it the first 3D film to be interrupted in production. Two of the three short films were shot: *Carmenesca*, a burlesque number starring the exotic dancer Lily St. Sear, and *Fun in the Sun*, a sports short film directed by famed set designer/director William Cameron Menzies, who also directed a 3D maze feature for allied artists. Although the installation was more expensive, the main competing process of realism was widescreen, but two-dimensional, anamorphic, first used by Fox with *CinemaScope* and its September premiere in *The Robe*. Anamorphic films needed only one print, so synchronization was not a problem. Cinerama was also a competitor from the beginning and had better quality control than 3D because it belonged to one company that focused on quality control. However, most of the 3D features in the summer of 1953 were released in flat widescreen formats ranging from 1.66:1 to 1.85:1. In early studio advertisements and articles about widescreen and 3D formats, widescreen systems were called 3D, causing some confusion among scientists. Until 1960, there was not a single case of CinemaScope combining 3D with a film called September Storm, and even then it was an explosion of anamorphic negativity. September Storm also came out with the last double-band short, *Space Attack*, which was actually filmed in 1954 under the name *Adventures of Sam Spide*. In December 1953, 3D made a comeback with the release of several important 3D films, including the MGM musical *Kiss Me*, By Kate. Kate had a hit over which 3D had to pass to survive. MGM tested it in six cinemas: three in 3D and three flat. According to the commercial announcements of the time, the 3D version was so well received that the film quickly entered the wide stereoscopic release. However, most publications, including Kenneth McGowan's classic film handbook behind the screen, will say that the film did much better as a regular release. The film, adapted from the popular musical Cole Porter Broadway, starred MGM songbird team Howard Keel and Katherine Grayson as leads, supported by Ann Miller, Keenan Wynne, Bobby Wang, James Whitmore, Kurt Kasznar and Tommy Rall. The film also significantly contributed to its use of stereophonic sound. Some of the other features that helped put 3D back on the map this month were John Wayne's feature *Hondo* (distributed by Warner Bros.), Miss Sadie Thompson's *Columbia* with Rita Hayworth, and *Paramount Money From Home* with Dean Martin and Jerry Lewis. Paramount also released cartoon shorts *boon moon* with Casper, *Friendly Ghost* and *Popeye*, an ace of space with *Popeye* sailor. Paramount Pictures releases 3D Korean military *Cease Fire*, filmed in real Korean locations in 1953. Top Banana, based on the popular stage musical with Phil Silvers, was brought brought screen with the original cast. While it was just a filmed stage of production, the idea was that each audience member would feel that they would have a better place in the house through color photography and 3D. (quote is needed) It remains one of two Golden Era 3D features, along with another feature by United Artists, *Southwest Passage* (with John Ireland and JoanNe) that are now considered lost (although flat versions survive). A series of successful 3D films followed the second wave, but many of them were widely or exclusively flat. Some highlights: French Line, starring Jane Russell and Gilbert Roland, Howard Hughes/RKO production. The film became infamous for being released without the MPAA's print of approval, after several suggestive texts were included, as well as one of Ms. Russell's particularly revealing costumes. Playing its sex appeal, one slogan for the film was: It will knock both eyes! The film was later cut and approved by the MPAA for general flat release, despite a wide and lucrative 3D release. (quote needed) *Taza*, Son of Cochise, a sequel to the 1950s *Broken Arrow*, which starred Rock Hudson in the title role, Barbara Rush as a love interest, and Rex Reason (announced as Bart Roberts) as his renegade brother. Originally released apartment through Universal-International. He was directed by the great stylist Douglas Sirk, and his striking visual sense made the film a huge success when it was re-premiered in 3D in 2006 at the second 3D Expo in Hollywood. Two Monkey movies: *The Ghost of Rue Morgue*, starring Carl Malden and Patricia Medina, produced by Warner Bros. and based on Edgar Allan Poe's *Murders on Morgue Street*, and *Gonilla in General*, a panoramic production starring Cameron Mitchell, distributed flat and 3D through Fox. *Creature from the Black Lagoon*, starring Richard Carlson and Julie Adams, directed by Jack Arnold. While perhaps the most famous 3D film, it is usually seen in 3D only in major city cinemas and shown flat in many small neighborhood cinemas. It was the only 3D feature that spawned a 3D sequel, *Revenge of the Creature*, followed by the *Creature Walks Among Us*, filmed exactly. *Dial M for The Murder*, directed by Alfred Hitchcock and starring Ray Milland, Robert Cummings, and Grace Kelly, is considered by 3D fans to be one of the best examples of this process. Although available in 3D in 1954, there are no known playdates in 3D, citation is necessary since Warner Bros. has just instated the simultaneous 3D/2D release policy. Showing the film in 3D in February 1980 at the York Theatre in San Francisco did so well Warner Bros. replayed the film in 3D in February 1982. The film is now available on 3D Blu-ray, marking the first time it was released on home video in its 3D presentation. *Gog*, the latest episode in *Ivan Tors' Office of Research* (OSI) trilogy deals with realistic science fiction (after *Magnetic Monster* and *Riders to the Stars*). Most theaters have shown it flat. *Diamond* (released in the United States as *Diamond Wizard*) is a 1954 British crime film starring Dennis O'Keefe. The only stereoscopic feature filmed in the UK has been released in the UK and US. Irvin Allen's dangerous mission, released by RKO in 1954 with Allen's trademarks from the star cast, faced a disaster (forest fire). Bosley Crowther's new *York Times* review mentions that it was shown flat. Sindbad's son, another RKO/Howard Hughes production, starring Dale Robertson, Lily St. Sear, and Vincent Price. The film was postponed after Hughes encountered difficulties with the French line, and was not released until 1955, at which time it came out flat, transformed into a SuperScope process. The final decline in 3D was in late spring 1954, for the same reasons as the previous lull, as well as the continued success of widescreen formats with theatrical operators. Although *Polaroid* created a well-designed *Tell-Tale Filter* kit to recognize and adjust from synchronization and phase 3D, exhibitors still felt uncomfortable with the system and turned their attention instead to processes such as CinemaScope. The last 3D feature released in this format during the Golden Era was *Revenge of the Creature* on February 23, 1955. Ironically, the film had a wide release in 3D and was well received at the box office. *Revival* (1960-1984) in the format of a single band Stereoscopic films largely remained dormant during the first part of the 1960s, with those that were released, usually anaglyphic exploitation of films. One of the fame films was the *Beaver-Champion*/Warner Bros. production, *Musk* (1961). The film was shot in 2-D, but to enhance the strange quality of the world of snoughs that induced when the main character puts on a damn tribal mask, these scenes went to anaglyph 3D. These scenes were printed by Technicolor on their first run in a red/green anaglyph. Although 3D films appeared rarely in the early 1960s, the true second wave of 3D cinema was launched by Arc Oboler, the producer who started the 1950s craze. The use of a new technology called *Space-Vision 3D*. The origins of *Space-Vision 3D*

dates back to Colonel Robert Vincent Bernier, a forgotten innovator in the history of stereoscopic motions. His Triopticon Space-Vision lens has been the gold standard for producing and exhibiting 3-D films for nearly 30 years. Stereoscopic Space-Vision 3D were printed with two images, one above in one academy the ratio of the frame, on one lane, and you only need one projector equipped with a special lens. This so-called over and under technique eliminated the need for a double projector setup and created widescreen but darker, less vivid, polarized 3D images. Unlike an earlier dual system, it can remain in perfect sync if incorrectly spliced in repair. Arch Oboler once again had a vision of a system that no one would touch, and put it in use in his film called Bubble, which starred Michael Cole, Deborah Wally, and Johnny Desmond. As is the case with Bwana Devil, critics cooked the bubble, but viewers flocked to see it, and it became financially sound enough to promote the use of the system for other studios, especially independents, who don't have the money for expensive two-lane prints of their productions. In 1970, Stereovision, a new organization founded by director/inventor Allan Silliphant and optical designer Chris Condon, developed another 35mm single-band format that printed two images, compressed side by side, and used an anamorphic lens to expand images through Polaroid filters. Louis C. Sher (Sherpix) and Stereovision released the softcore sex comedy The Stewardesses (self-assessment X, but later reclassified R from MPAA). The film cost US\$100,000 to produce, and ran for months in several markets. Citation Is Necessary ended up earning \$27 million in North America alone (\$140 million in permanent 2010 dollars) in less than 800 theaters, becoming the most lucrative 3-dimensional film to date, and in the purely relative terms, one of the most profitable films ever. It was later released in 70mm 3-D. About 36 films worldwide have been made with Stereovision for 25 years, using either widescreen (above below), Anamorphic (side by side) or 70mm 3D formats. In 2009, The Stewardesses was remastered by Chris Condon and directed by Ed Mayer, releasing it in XpanD 3D, RealD Cinema and Dolby 3D. The quality of 3D movies of the 1970s was not much more inventive, as many were either softcore and even hardcore adult movies, horror films, or combination both. Paul Morrissey's flesh for Frankenstein (aka Frankenstein's Andy Warhol) was an excellent example of such a combination. Between 1981 and 1983 there was a new Hollywood 3D craze started by Spaghetti Westerns Comin' on Ya!. When Parasite was released it was billed as the first horror film to come out in 3D in more than 20 years. Horror films and re-releases of 1950s 3D classics (such as Hitchcock's Dial M for Murder) dominated 3D releases. The second sequel to Friday's 13th series, Friday the 13th part III, was released very successfully. Apparently saying part 3 in 3D is considered too to have it shortened in the names Jaws 3-D and Amityville 3-D, which highlighted the effects of the screen to such an extent, annoying on the especially when the lanterns show in the eyes of the spectators. The sci-fi film Spacehunter: Adventures in the Forbidden Area was the most expensive 3D film made up to this point with production costs about the same as Star Wars, but not nearly the same box office success, making the craze quickly disappear until the spring of 1983. Other sci-fantasy films have been released, as well as including Metalstorm: The Destruction of Jared-Sin and the Treasure of the Four Crowns, which has been widely criticized for poor editing and plot holes, but feature some really impressive close-ups. 3D releases after the second hobby included The Man Who Wasn't There (1983), Silent Madness and the 1985 animated film Starchaser: The Legend of Orin, whose plot seemed to be heavily borrowed from Star Wars. Only Comin' At Ya!, Parasite, and Friday the 13th part III were officially released on VHS and/or DVD in 3D in the United States (although Amityville 3D has seen a 3D DVD release in the United Kingdom). Most 3D films from the 1980s and some classic 1950s movies, such as House of Wax, were released in the now defunct Video Disc (VHD) format in Japan as part of a system that used shutter glasses. Most of them have been unofficially transferred to DVDs and are available in the grey market through sites such as eBay. Stereoscopic films were also popular in other parts of the world, such as My Dear Kuttichathan, a Malayalam film that was shot with stereoscopic 3D and released in 1984. Revival of 3D (1985-2003) in the mid-1980s, IMAX began producing non-fiction films for its nascent 3D business, starting with We Are Born of Stars (Roman Kroitor, 1985). The key point was that this production, like all subsequent IMAX productions, emphasized the mathematical correctness of the 3D issue and thus largely eliminated the fatigue and pain of the eyes that were caused by the approximate geometry of previous 3D incarnations. Also, and unlike previous 35mm 3D presentations, the very large field of view provided by the very large field of view provided by IMAX has allowed for a much wider 3D scene, perhaps as important in a 3D film as theatre. The Walt Disney Company has also begun a more visible use of 3D films in special locations to impress audiences with Magic Journeys (1982) and Captain EO (Francis Ford Coppola, 1986, starring Michael Jackson) is a notable example. That same year, the National Film Council of Canada produced Transitions (Colin Love), created for Expo 86 in Vancouver, had the first IMAX presentation using polarized glasses. Echoes of the Sun (Roman Kroitor, 1990) is the first IMAX film to be introduced using alternative eyeglass technology, which is necessary for development as the domed screen excludes the use of Technology. Since 1990, numerous films have been produced by all three parties to meet the demands of their various high-profile special attractions and IMAX's 3D network. Films of particular attention during this period include the extremely successful in depth (Graham Ferguson, 1995) and the first IMAX 3D feature film Wings of Courage (1996), directed by Other Stereoscopic Films, Produced during this period include: The Last Buffalo (Stephen Love, 1990) Jim Henson in Muppet-Vision 3D (Tim Henson, 1991) Imagine (John Whyte, 1993) Honey, I Shortened Audience (Daniel Rustuccio, 1994) In Depth (Graham Ferguson, 1995) Through the Sea of Time (Stephen Love, 1995) Wings of Courage (Jean-Jacques Annaud, 1996) L5, First City in Space (Graham Ferguson Ferguson, 1996) T2 3-D: Battle of Time (James Cameron, 1996) Paint Misbehavior (Roman Kreuter and Peter Stevenson, 1999) IMAX Yelkunchik (1997) Hidden Dimension (1997) T-Rex: Back in Chalk (Brett Leonard, 1998) America By Mark Twain (Stephen Love, 1998) Siegfried and Roy: The Magic Box (Brett Leonard, 1999) The Galapagos Islands (Al Giddings and David Clarke, 1999) Meeting in the Third Dimension (Ben Stassen, 1999) Alien Adventure (Ben Stassen, 1999) Ultimate G's (2000) Cyberworld (Hugh Murray, 2000) Cirque du Soleil: The Journey of Man (Keith Melton, 2000) Haunted Castle (Ben Stassen, 2001) Panda Vision (Ben Stassen, 2001) Space Station 3D (Tony Myers, 2002) SOS Planet (Ben Stassen, 2002) Ocean Wonderland (2003) Fall in Love Again (Manro Ferguson, 2003) Misadventures in 3D (Ben Stassen, 2003) By 2004, 54% of IMAX cinemas (133 out of 248) were able to show 3D movies. Soon after, higher quality computer animation, competition from DVDs and other media, digital projection, digital video capture, and the use of sophisticated IMAX 70mm film projectors, created the opportunity for another wave of 3D movies. Revival of Mainstream (2003-present) In 2003, The Ghosts of the Abyss by James Cameron was released as the first full-length 3D IMAX feature, filmed with a reality camera system. This camera system used the latest HD video cameras, not film, and was built for Cameron by Vince Pace, in his specifications. The same camera system was used for the film Spy Kids 3-D: Game Over (2003), Aliens from Deep IMAX (2005), and The Adventures of Sharkboy and Lavagirl in 3-D (2005). In 2004, the Las Vegas Hilton released Star Trek: The Experience, which included two films. One of the films, Borg Invasion 4-D (Tai Granoroli), was in 3D. In August of that year, rap group Insane Clown Posse released their ninth studio album Hell's Pit. One of the two versions of the album contained a DVD of a 3D short film for the track Bowling Balls shot in a high-definition video. Filming the film Hidden Universe 3D with an IMAX camera. In November 2004, The Polar Express was released as the first full-time, animated 3D feature of IMAX. It was released in 3,584 cinemas in 2D, and only 66 IMAX locations. Return accounted for about 25% of the total. The 3D version has earned about 14 times more on the screen than the 2D version. This model continued and generated much more intense interest in 3D and 3D presentations of animated films. In June 2005, the Mann 6 Chinese Theatre in Hollywood became the first commercial cinema equipped with a digital 3D format. Both Singin' in the Rain and Polar Express have been tested in digital 3D format for months. In November 2005, Walt Disney Studio Entertainment released Chicken Little in a digital 3D format. The Butler's in Love, a short film directed by David Arquette starring Elizabeth Berkley and Thomas Jane, was released on June 23, 2008. The film was shot at the former studio of Industrial Light and Magic using the prototype KernerFX in a stereoscopic camera installation. Ben Walkers suggested in 2009 that both filmmakers and film exhibitors restore interest in the 3D film. There was more 3D exhibition equipment, and more dramatic films were shot in 3D format. One incentive is that the technology is more mature. Shooting in 3D format is less limited, and the result is more stable. Another incentive was the fact that while 2D ticket sales were in a general state of decline, revenues from 3D tickets continued to grow at the time. Throughout the history of 3D presentations, there have been methods of converting existing 2D images for 3D presentation. Few of them were effective or survived. The combination of digital and digitized source materials with relatively cost-effective digital after processing has created a new wave of conversion products. In June 2006, IMAX and Warner Bros. released Superman Returns, including 20 minutes of 3D images transformed from 2D original digital frames. George Lucas has announced that he will re-release his Star Wars films in 3D based on the transformation process from in-theatre. Later, in 2011, it was announced that Lucas was working with Prime Focus on this transformation. In late 2005, Steven Spielberg told the press that he was engaged in patenting a system of 3D cinemas that did not need glasses based on plasma screens. The computer divides each film frame and then projects two separated images onto the screen at different angles, which will be picked up by tiny angular ridges on the screen. The animated films Open Season and The Ant Bully were released in analogue 3D in 2006. Monster House and The Nightmare Before Christmas were released on XpanD 3D, RealD and Dolby 3D Systems in 2006. On May 19, 2007, Scar3D opened at the Cannes Film Market. It was the first 3D feature film of American production, which was completed in Real D 3D. It was the most #1 at the box office in several countries, including Russia, where it opened in 3D on 295 screens. January 2008 U2 3D was released; It was the first live action digital 3D 3D 3D That same year, other 3D films included Hannah Montana and Miley Cyrus: Best of Both Worlds Concert, Journey to the Center of the Earth, and Bolt. On January 16, 2009, Lionsgate released My Bloody Valentine 3D, the first horror film and the first R-rated film to be projected into Real D 3D. Another R-rated film, The Final Destination, was released in August on an even larger screen. It was the first of his series to be released in HD 3D. Major 3D movies in 2009 included Coroline, Monsters vs. Aliens, X, X Games 3D: Movie, Final Destination, Disney Christmas Song, and Avatar. Avatar became one of the most expensive films of all time, with a budget of \$237 million; it is also the second highest-grossing film of all time. The main technologies used for the exhibition of these films, and many others released in time and to the present, are Real D 3D, Dolby 3D, XpanD 3D, MasterImage 3D and IMAX 3D. March and April 2010 saw three major 3D releases grouped together, with Alice in Wonderland hitting American theaters on March 5, 2010, How to Teach a Dragon on March 26, 2010, and Clash of Titans on April 2, 2010. On May 13 of the same year, the first IMAX 3D film began filming in China. On October 1, 2010, Scar3D became the first ever stereoscopic 3D video on demand, released through major cable broadcasters for 3D TVs in the United States. Released in the US on May 21, 2010, Shrek Forever After by DreamWorks Animation (Paramount Pictures) used a Real D 3D system also released in IMAX 3D. World 3-D Exhibitions In September 2003, Sabucat Productions organized the first World 3-D exhibition dedicated to the 50th anniversary of the original craze. The expo was held at the Egyptian Grauman Theatre. During the two-week festival, more than 30 of the 50 golden era stereoscopic features (as well as shorts) were shown, many from the collection of film historian and archivist Robert Furmanek, who spent the previous 15 years painstakingly tracking and preserving each film to its original glory. In attendance there were many stars from each film, respectively, and some of them were moved to theaters by sold-out seating with an audience of moviegoers from around the world who came to remember their previous fame. In May 2006, the second World 3-D Exhibition was announced in September of that year, presented by the 3-D Film Conservation Foundation. Along with the favorites of the previous exposure were rediscovered features and shorts, and, like previous Expo, guests from each film. Expo II was announced as the venue for the world premiere of several films never before seen in including Diamond Wizard and Universal Short, Hawaiian Nights with Mimi Van Doren and Pinky Lee. Other reremiers of films not shown since their initial stereoscopic release included Cease Fire!, Taza, Son of Cochise, Wings of the Hawk and Redheads from Seattle. Also featured were long-lost Carmenesque and A Day in the Country shops (both 1953) and two shorts by William Van Doren Kelly "Playstun". Declining audiences due to its initial popularity and corresponding increase in screen numbers, more movies you're coming out in 3D. For example, only 45% of weekend box office earnings of Kung Fu Panda 2 came from 3D hits, up from 60% for Shrek Forever After in 2010. In addition, the premiere of Cars 2 consisted of 37% of 3D theaters. Harry Potter and the Deathly Hallows - Part 2 and Captain America: The First Avenger were major releases that reached similar percentages: 43% and 40% respectively. In connection with this trend, a cash analysis was carried out, which concluded that the implementation of the 3D presentation, apparently, can not but allow people to go to the cinemas at all. As Brandon Gray of Box Office Mojo notes: In each case, the 3D approach to fewer people simply resulted in less money from even fewer people. In parallel, the number of TVs sold with 3D-enabled television has decreased, not to mention those sold with actual 3D glasses. According to the American Film Association, despite a record 47 3D films in 2011, total domestic box office fees fell 18% to \$1.8 billion from \$2.2 billion in 2010. Although revenues generally increased during 2012, the bulk of it still came from 2D presentations, as evidenced by just over 50% of moviegoers who prefer to see the likes of The Avengers, and 32% choose Brave in their 3D versions. Controversial reasons, respectively, offer studios and exhibitors: while the former blame more expensive prices for 3D tickets, what they claim is to blame for the quality of the films as a whole. However, despite the expected decline in 3D in the U.S. market, studio executives are optimistic about the best revenue at the international level, where there is still a strong appetite for the format. Studios also use 3D to generate additional revenue from films that are already commercially successful. Such remediations are usually associated with the transformation of 2D. For example, Disney has reissued both The Lion King and Beauty and the Beast, with plans to add some of its other famous titles. Titanic has also been modified for 3D, and there are also plans to similarly present all six Star Wars films. Jeffrey Katzenberg, producer of 3D films and one of the leading proponents of the format, blames Market with substantial films, especially those photographed conventionally and then digitally processed in post-production. He argues that such films have led viewers to conclude that the format is often not worth the much higher ticket price. Daniel Engber, a Slate columnist, comes to a similar conclusion: What happened to 3-D? He may have died of a case of acute septicaemia - too much crap in the system. However, the global box office has six films whose combined 2D and 3D versions have grossed more than \$1 billion each: three in 2011, two in 2010 and one in 2009. Film critic Mark Kermode, in a well-known 3D detractor, has suggested that there is a new distributor policy to limit the availability of 2D versions, thus railing the 3D format in cinemas whether to pay a moviegoer likes it or not. This was particularly common during the release of Prometheus in 2012. When only 30% of the prints for the theatre exhibition (at least in the UK) were in 2D. In July 2017, IMAX announced that they would start focusing on showing more Hollywood tent films in 2D (even if there is a 3D version) and have fewer 3D movie screenings in North America, citing the fact that moviegoers in North America prefer 2D movies to 3D movies. Methods Additional information: Stereoscopic stereoscopic motions can be produced using a variety of methods. Over the years, the popularity of systems widely used in cinemas waxed and waned. Although analogish was sometimes used until 1948, at the beginning of the Golden Era of 3D Cinema in the 1950s, the polarization system was used for every feature film in the United States and only one short one. In the 21st century, the stage continued to be dominated by polarizing 3D systems, although in the 1960s and 1970s some classic films were transformed into analogish for theaters not equipped for polarization, and even were shown in 3D television. In the years following the mid-1980s, some films were shot with short segments in analogish 3D. Below are some technical details and methodology used in some of the most notable 3D film systems that have been developed. Production of 3D Movies Live Action Home article: Stereo Methods Photography Standard for shooting live action movies in 3D includes the use of two cameras installed so that their lenses are about as far apart as the average pair of human eyes, recording two separate images for the left eye and the right eye. Basically, two conventional 2D cameras can be put from side to side, but this is problematic in many ways. The only real option is to invest in new stereoscopic cameras. Some cinematic tricks that are simple with a 2D camera become impossible when shooting in 3D. This means that those otherwise cheap tricks have to be replaced by expensive CGI. In 2008, Journey to the Center of the Earth was the first live feature film shot with the earliest Fusion Camera System, released in Digital 3D, followed by several other films. Avatar (2009) was filmed in a 3D process that is based on how the human eye looks at the image. This was an improvement on the existing 3D camera system. Many 3D camera installations are still used simply by a pair of two cameras side by side, while the new setup is paired with a beam splitter or both camera lenses built into one unit. While digital movie cameras are not a requirement for 3D they are the predominant remedy for most of what is photographed. Movie options include IMAX 3D, RealD Cinema, and 3D segments of Spy Kids 3-D: Game Over. Analogish is also used in print and 3D television shows where polarization is not practical. 3D polarized TVs and other displays became available only from a few manufacturers in 2008; they generate polarization at the receiving end. The polarization systems of cardboard 3D linear polarized glasses of the 1980s are similar to those used in the 1950s. While some were plain white, they often had the name of the theater and/or graphics from the movie's main article: Polarized 3D System To Present a Stereoscopic Motion Picture, two images projected onto one screen through different polarizing filters. The viewer wears inexpensive glasses, which also contain a pair of polarizing filters oriented differently (clockwise/counterclockwise with circular polarization or at a 90 degree angle, usually 45 and 135 degrees, with linear polarization). Because each filter passes only that light that is similarly polarized and blocks the light polarized differently, each eye sees a different image. It is used to produce a three-dimensional effect by projecting the same scene into both eyes, but is depicted from several different angles. Because head tracking isn't involved, the entire audience can view stereoscopic images at the same time. Resembling sunglasses, RealD circular polarized glasses are now the standard for theatrical releases and theme park rides. Circular polarization has an advantage over linear polarization, in that the viewer does not need to have the head vertically and aligned with the screen for polarization to work properly. With linear polarization, turning the points to the side causes the filters to come out of the alignment with the screen filters, causing the image to disappear and making it easier for each eye to see the opposite frame. For circular polarization, the polarizing effect no matter how the viewer's head is aligned with the screen, for example, tilted to the side or even upside down. Left eye still see the image intended for it, and vice versa, without fading or cross-talking. However, 3D movies are made for viewing without tilting the head, and any significant head tilt will result in the wrong parallax and prevent binocular fusion. In the case of RealD, a circular polarizing liquid crystal filter is placed in front of the projector lens, which can switch polarity 144 times per second. Only one projector is required, as the images of the left and right eyes appear alternately. Sony has a new system called RealD XLS that shows both circular polarized images simultaneously: one 4K projector (4096x2160 resolution) displays both 2K images (2048x1080 resolution) at each other at the same time, a special attachment of the lens polarizes and projects the image. Optical attachments can be added to traditional 35mm projectors to adapt them to project the film in an over-and-under format in which each pair of images is placed in one frame of the film. These two images are projected through various polarizers and superimposed on the screen. This is a very cost-effective way of converting a theater to a 3-D, as all you need is an attachment and non-depolarization of the screen surface, rather than converting to a digital 3-D projection. Thomson Technicolor currently manufactures this type of adapter. A metal screen is necessary for these systems, as the reflection from non-metallic surfaces destroys the polarization of light. Polarized stereoscopic images have been around since 1936, when Edwin H. Earth first applied it to movies. The so-called fascination with 3-D film in 1952-1955 was almost entirely offered in cinemas using linear polarizing projection and glasses. Only a minute's count of the total volume of 3D films shown during the period used the analogish color filter method. Linear polarization was also used with consumer-level stereo projectors. Polarization was also used during the 3D renaissance of the 1980s. In the 2000s, computer animation, competition from DVDs and other media, digital projection and the use of complex IMAX 70mm film projections created the opportunity for a new wave of polarized 3D movies. All types of polarization will result in a dimming of the image displayed and a worse contrast than non-3D images. Light from lamps usually radiates as a random collection of polarization, while the polarization filter passes only a fraction of the light. As a result, the screen image is darker. This darkening can be compensated by an increase in the brightness of the projector's light source. If the initial polarization filter is inserted between the lamp and the image generation element, the intensity of the light, the image element is no higher than normal without a polarizing filter, and the overall contrast of the image transmitted to the screen does not affect. Active Active A pair of LCD shutter glasses are used to watch XpanD 3D movies. Thick frames hide electronics and batteries. Main article: Active Shutter 3D System In this technology, the mechanism is used to block light from each corresponding eye when an image of the reverse eye is projected onto the screen. The technology originated with the Eclipse method, in which the projector alternates between left and right images, and opens and closes the shutters in glasses or the viewer in sync with the images on the screen. This was the basis of the Television system, which was briefly used in 1922. The newer implementation of the Eclipse method came with LCD shutters. Glasses containing a liquid crystal that will allow light through in sync with images on the screen of a movie theater, television or computer, using the concept of alternative frame sequence. This is the method used by nVidia. XpanD 3D and earlier IMAX systems. The downside of this method is the need for every viewing person to wear expensive, electronic glasses that must be synchronized with the display system using a wireless signal or attached wire. Shutter-glasses are heavier than most polarized glasses, although lightweight models are no heavier than some sunglasses or luxurious polarized glasses. However, these systems do not require a silver screen for projected images. The values of liquid crystal light work by rotating light between two polarizing filters. Because of these internal polarizers, LCD shutter-glasses obscure the display image of any LCD, plasma, or projector image, which has the result that the images seem dim and contrast lower than for normal non-3D viewing. This is not necessarily a usage issue: For some types of displays that are already very bright with poor grayish-black levels, LCD shutter glasses can really improve image quality. Interference filter technology Main article: Anaglyph 3D - Dolby 3D Interference Filter Systems uses specific wavelengths of red, green and blue for the right eye, as well as different wavelengths of red, green and blue for the left eye. Glasses that filter out very specific wavelengths allow the wearer to see a 3D image. This technology eliminates the expensive silver screens needed for polarized systems such as RealD, which is the most common 3D display system in cinemas. This, however, require much more expensive glasses than a polarized system. It is also known as spectral combing filter or wavelength multiplex imaging recently unveiled Omega 3D/Panavision 3D system also uses this technology, albeit with a wider range and more teeth on the crest (5 for each eye in the system / Panavision). Using more spectral bands on the eye eliminates the need for the color image process required by the Dolby system. The even division of the visible spectrum between the eyes gives A more relaxed feel as the light energy and color balance is almost 50-50. Like the Dolby system, omega can be used with white or silver screens. But it can be used with film or digital projectors, unlike Dolby filters, which are only used in a digital system with a color correction processor provided by Dolby. The Omega/Panavision system also claims that their glasses are cheaper to manufacture than those used by Dolby. In June 2012, omega 3D/Panavision's 3D system was discontinued by DPVO Theatrical, which launched it on behalf of Panavision, citing challenging global economic and 3D market conditions. Although DPVO has dissolved its business operation, Omega Optical continues to promote and sell 3D systems to non-theatrical markets. Omega Optical's 3D system contains projection filters and 3D glasses. In addition to the passive stereoscopic 3D system, Omega Optical has released improved anaglyph 3D glasses. Omega red/cyanide anaglyph glasses use sophisticated metal oxide thin film coatings and high-quality anodized glass optics. Autotheorescopy In this method, glasses do not necessarily see a stereoscopic image. Lenticular lenses and parallax barrier technologies include overlaying two (or more) images on one sheet, in narrow, alternating stripes, and using a screen that either blocks one of the bands of the two images (in the case of parallax barriers), or uses equally narrow lenses to bend the stripes of the image and make it appear to fill the entire image (in the case of lenticular imprints). To produce a stereoscopic effect, a person must be positioned so that one eye sees one of the two images and the other sees the other. Both images are projected onto a highly heated, corrugated screen that reflects light at sharp angles. In order to see a stereoscopic image, the viewer must sit at a very narrow angle, which is almost perpendicular to the screen, limiting the size of the audience. The lenticular was used for the theatrical presentation of numerous short films in Russia in 1940-1948 and in 1946 for the feature film Robinson Crusoe. Despite the fact that its use in theatrical productions was rather limited, lenticular was widely used for various novelties and was even used in amateur 3D photography. Recent use includes Fujifilm FinePix Real 3D with an autostereoscopic display, which was released in 2009. Other examples of this technology include autostereoscopic LIQUIDCR displays on monitors, laptops, TVs, mobile phones and gaming devices such as The Nintendo 3DS. Health Effects Basic Health Effects 3D Some viewers have complained of headaches and eye strain after watching 3D movies. Motion sickness, in addition to other health problems, is more easily induced by 3D presentations. One published study shows that of those who watch 3D movies, 55% experience different levels of headaches, nausea and disorientation. There are two main effects of 3D film that are unnatural to human vision: cross-conversation between the eyes, caused by the imperfect separation of the image, and the discrepancy between convergence and placement, caused by the difference between the perceived position of the object in front of the screen or behind it and the real origin of the light on the screen. It is estimated that approximately 12% of people are unable to properly see 3D images, due to a condition known as Accommodation-convergence conflict. The distance between the eyes and the screen is not the same as the distance to the object, preventing the eyes from focusing properly, preventing them from perceiving depth based on stereo inequality. This is also the case with the distance to the point on the object, which is in focus on a particular rod or cone. Each rod or cone can act as a passive iDAR (Light Detection and Ranging). The lens selects the point on the object for each pixel to which the distance is measured; that is, people can see in 3D separately with each eye. If the brain uses this ability in addition to stereoscopic effects and other signals, no stereoscopic system can present a true 3D image to the brain. The French National Research Agency (ANR) has sponsored interdisciplinary research to understand the implications of watching 3D films, their grammar and its adoption. Criticism after the story with toys, there were 10 really bad CG movies, because every thought that the success of this system was CG, not great characters that were beautifully designed and touching. Now, you have people quickly converting movies from 2D to 3D, which is not what we did. They expect the same result when in fact they will probably work against making 3D because they will be putting out a substandard product. Avatar director James Cameron, most of the signals needed to provide people with the relative depth of information already present in traditional 2D movies. For example, closer objects close further, distant objects are unsaturated and foggy compared to loved ones, and the brain subconsciously knows the distance of many objects when the height is known (for example, a human figure, subdividing only a small amount of screen, is more likely to be 2 meters high and farther than 10 cm in height and close). In fact, only two of these depth signals are no longer present in 2D films: stereopsis (or parallax) and eyeball focus (placement). 3D film-making addresses an accurate representation of stereopsis, but not placement, and therefore not enough in providing a complete 3D illusion. However, the results of studies aimed at overcoming this deficiency were presented in 2010 on stereoscopic displays and At a conference in San Jose, American film critic Mark Kermode claimed that 3D adds not much value to the film, and said that while he liked Avatar, many of the impressive things he saw in the film had nothing to do with 3D. Kermode has been an outspoken critic of the 3D film, describing the effect as nonsense and recommends using two right or left lenses of 3D glasses to cut the sharper, sharpening 3D stereoscopic vision, although this method still does not improve the huge loss of brightness from the 3D film. Versions of these 2-D glasses are currently on the market. As stated in the article Virtual Space - Movies of the Future, in real life 3D effect, or stereoscopic vision, depends on the distance between the eyes, which is only about 2 1/2 inches. The depth of perception it gives only noticeably near the head - about the length of the hands. This is only useful for tasks such as threading a needle. It follows that in films depicting real life, where nothing is ever shown so close to the camera, the 3D effect is not noticeable and is soon forgotten as the film continues. Director Christopher Nolan criticized the idea that a traditional film doesn't allow depth of perception, saying: I think it's wrong to call it 3D vs 2D. The whole point of cinematic images is that it's three-dimensional... You know 95% of our depth signals come from occlusion, resolution, color and so on, so the idea of calling a 2D movie a 2D movie is a bit misleading. Nolan also criticized that shooting on the required digital video does not provide a high-quality image and that 3D cameras cannot be equipped with prime (non-zoom) lenses. The late film critic Roger Ebert has repeatedly criticized the 3D film as too dim, sometimes distracting or even causing nausea, and claimed it's an expensive technology that doesn't add anything to the film (since 2-D movies already provide enough 3D illusion). While Ebert was not against 3-D as an option, he opposed it as a replacement for a traditional film, and preferred 2-D technologies such as MaxVision4D, which improve the area of image resolution and frames per second. Brightness raises fears that most 3D systems will significantly cut the brightness of the image - the loss of light may be above 88%. Some of these losses can be compensated by running the projector lamp at higher power or using more powerful lamps. The standard 2D maximum cinema is 14 f (48 candela per square meter) standard set by the SMPTE 196m standard. In accordance with the industry standard de facto, however, the acceptable range of brightness goes as low as 3.5 fL (12 cd/m²) - just 25% of the standard 2D brightness. Christopher Nolan, in particular, criticized Loss of brightness: You're not that aware of it, because once you're "in this world," your eye compensates, but by struggling for years to get theaters to proper brightness, we don't stick to polarized filters throughout. In September 2012, the DCI Standards Authority issued a recommended practice calling for 3D projection brightness of 7 fL (24 cd/m²), with an acceptable range of 5-9 fL (17-31 cd/m²). It is not known how many theaters actually reach this level of illumination with the help of modern technology. The prototype of laser projection systems reached 14 fL (48 cd/m²) 3D on the cinema screen. After converting the main article 2D to 3D conversion, both the criticism is that many of the films of the 21st century to date have not been shot in 3D, but converted to 3-D after filming. Cinematographers who have criticized the quality of this process include James Cameron, whose film Avatar was created mostly in 3D from scratch, with some parts of the film created in 2D, and largely credited with reviving 3D and Michael Bay. However, Cameron said that quality 2D conversions in 3D can be made if they take away the time they need and the director will participate. Cameron's Titanic was converted to 3D in 2012, in 60 weeks and worth \$18 million. In contrast, computer-animated movies for which original computer models are still available can be easily shown in 3D, as depth information is still available and does not need to be withdrawn or approximated. This was done with Toy Story, among others. See also the List of 3D Movies until 2005. List of 3D Movies (2005) List of Blu-ray 3D releases 2D to 3D conversion Depth Perception Stereoscopic Autostereoscopic 3D display 3D TV 4D Volumetric display 3-D Movie Preservation The Movement Capture Foundation Stereoscopic video game Surround Sound 3D formats Digital 3D Disney Digital 3-D RealD 3D Dolby 3D XpanD 3D MasterImage 3D IMAX 3D 4DX Lenses (2018). 3D is dead (angl.) - Belgian, Academy of Royal Sciences, de Lettre and Fins Arts de (1849). Bulletins de l'Academy Royale des Sciences, des Lettres et des Beaux-Arts de Belgique (in French). Hayes. Pellierin, Denis (October 13, 2017). In Search of Stereoscopic Motion: Was the First Movie Ever in 3-D?. International Journal of Stereo and Immersive Media. 1 (1). ISSN 2184-1241. La Lumiere 1851-1116 - British Patent 711 - Le Cosmos 1852-10-03 - Chermack (1855). Das Stereophoskop (in German). Ray (February 3, 2014). Stereoscopic film and origins of the 3-D film, 1838-1952. University Of Kentucky Press. ISBN 9780813145891 - via Google Books. International Exhibition, 1862 (April 10, 1862). Medals and honorary mentions awarded by the International Jury; with ... Her Commissioners - online Archive.CS1 maint: names: list of authors (link) - Hunting, Robert (1816). Handbook to the Industrial Department of the International Exhibition, 1862. Encyclopedia of Chambers: A Dictionary of Universal Knowledge for the People. W. and R. Chambers, April 10, 1868 - via Google Books. - Muybridge, Eadweard (September 24, 2012). Beasts on the move. The Courier Corporation. ISBN 978-0-486-12999-0. Lockyer, Sir Norman (1878). Nature. Macmillan Journal Limited. page 242. kinesiograph. Herbert, Steven (1998). Industry, freedom and vision: Wordsworth Donisthorp's Kinesiograph. The projection box. ISBN 978-0-9523941-3-6. B Limbacher, James L. Four aspects of the film. 1968. Norling, John A. Basic Principles of 3D Photography and Projection. New Screen Methods, page 48. Hodgson, Laura. It came from space - but 3D is here to stay?. edition.com.cn. Received on August 29, 2017. Denig, Lind. Stereoscopic pictures screened. Moving Picture World, June 26, 1915, page 2072. And Leo Lee, Katarina. Tangible Ghosts: 3-D Movies in the 1910s. Film critic. The Power of Love (1922) - through www.imdb.com. silentera.com. silentera.com archive from the original on December 31, 2010. Received on October 14, 2010. - Ray Area, Stereoscopic Cinema - Origins of 3D Film (University Press of Kentucky, 2007) ISBN 0-8131-2461-1. p. 110 and - Simmes, Daniele L. 3-D Power. 3dmovingpictures.com. 3dmovingpictures.com. Received on June 3, 2020. b Chopper, article by Daniel L. Simmes. 3dmovingpictures.com. received on June 3, 2020. SEZION199-REDISC-TECN. Archive from the original on September 27, 2007. Received on October 14, 2010. Silent Era : Progressive silent film list. silentera.com. Archive, October 21, 2012. in Betsy A. MacLAINe's article 3D Wise in Wayback Machine L'Arrive du 3-D. Youtube. Received on March 28, 2013. Instant history. Americanheritage.com archive from the original on January 13, 2010. Received on October 14, 2010. Edwin Herbert Land. Archive from the original on June 22, 2006. Received on July 29, 2006. Ray area, stereoscopic cinema - origins of 3D film (University Of Kentucky Press, 2007) ISBN 0-8131-2461-1. page 152 and Weber, Frank A., M.Sc (1953). 3-D in Europe, New screen methods. 71. Gunzberg, M.L. (1953). What is Natural Vision?. New Screen Techniques. 55-59. Ray (2012). 3-D Revolution: A History of Modern Stereoscopic Cinema. Lexington: University of Kentucky Press. p. 7-8 - Less acquires the rights to the British Tri-Opticon. BoxOffice October 25, 1952: 21 - Just like 1927. BoxOffice February 7, 1953: 12. Ceasefire - 3dfilmarchive.com. Received on August 29, 2017. Furmanek, Bob and Kintz, Greg. (circa 2012). A deep view of the creature from the Black Lagoon (3dfilmarchive.com). Received 2013-11-19. Amazing 3D Hal Morgan and Dan Simms Little, Brown and Company (Canada) Limited, pages p. 104-105 - Bubble - 3dfilmarchive.com. - IMAX Annual Report, 2004, page 7, a b All things are reviewed (January 24, 2010). Movie ticket sales are superior to DVD numbers. Npr. Received on October 14, 2010. B Manjul, Farhad. A look at Disney and Pixar's 3D film technology. 2008.04.09. Downloaded 2009.06.07 - Anderson, John (March 26, 2009). 3-D is not in Hollywood. Newsday. Received on April 4, 2009. World premiere of IMAX 3D film Hidden Universe. ESCO press release. Received on July 27, 2013. Butler in Love (2008). Imdb. Received on January 22, 2011. Walters, Ben. Great leap forward: View and sound, 19 3 (2009). p. 38-41. George Lucas updates Star Wars 3D transformation. Archive from the original on October 20, 2011. Received on January 3, 2012. Movie. Los Angeles Times, January 11, 2009. Archive from the original on February 2, 2009. Received on January 21, 2009. Fact: Post-conversion 3D Sucks... and so is the prime focus. Bloody-disgusting.com. April 5, 2010. Received on October 14, 2010. KFP 2 studios in the U.S., viewers avoid 3D versions. Cartoon Brew. Archive from the original on June 3, 2011. Received on May 31, 2011. Pamela McClintock (June 27, 2011). Box Office Reporter: Can Transformers' Reverse 3D Decline?. The Hollywood Reporter. Received on June 27, 2011. About.com 3D: 3D ticket sales by interest. About.com. Received on August 28, 2012. Gray, Brandon. Junes sees Box Office Dip. Box Office Mojo. Archive from the original dated July 10, 2011. Received on July 6, 2011. 3D movies are declining at the box office. Studio briefing. Received on August 28, 2012. Led by families, interest in 3D is falling among U.S. consumers. Digital trends, July 14, 2012. Received on August 28, 2012. Pamela McClintock (July 11, 2012). Box Office Mid-Year Report: What worries Hollywood. The Hollywood Reporter. Received on August 28, 2012. Disney re-borrow 4 Hit Animated Movies in 3D. Mashable Entertainment. Received on August 30, 2012. Titanic 3D review. Rolling Stone, April 5, 2012. Received on August 30, 2012. Star Wars Saga Getting Re-Released. A sccriant. Received on August 30, 2012. Poll: 3D movies - have you had enough of them?. Digital show. Received on June 14, 2011. Four Theories about Death 3-D - Slate Magazine. Slate. September 15, 2011. Received on August 29, 2012. Prometheus: 2D v 3D. BBC Kermode Uncot. Received on August 28, 2012. 3D: alive or dead?. BBC: Kermod Uncote. Received on September 21, 2012. Ethan Vlessing (July 16, 2017). Imax to screen more Hollywood tentpoles 2D. Citing Citing Preference.. The Hollywood Reporter. Received on July 17, 2017. Amazing 3D and Dan Simms Little, Brown and Company (Canada) Limited, page 165-168. a b Amazing 3D Hal Morgan and Dan Simms Little, Brown and Company (Canada) Limited, page 163 - Why 3D will fail... Again, he said. June 9, 2012. Squires, Scott (August 4, 2011). Effects corner: 2D to 3D conversions. Why 3D will fail... Again, he said. r-d.lex.be. - b Amazing 3D By Hal Morgan and Dan Simms Little, Brown and Company (Canada) Limited, p. 165-169. Make Your Own Stereo Pictures Julius B. Kaiser Macmillan Company 1955 page 271 Archive February 26, 2011, at Wayback Machine - Sony Digital Cinema 3D Presentation - Technicolor 3D. Technicolor.com archive from the original on March 27, 2010. Received on October 14, 2010. Amazing 3D Hal Morgan and Dan Simms Little, Brown and Company (Canada) Limited, p. 15-16. See spec. 1.27oz with batteries Archived May 11, 2011, at Wayback Machine Seeing, Believes; Movie Technology, Volume 24, No 1 March 2011 - Home. Archive from the original on April 7, 2012. Received on April 3, 2012. John Bailey (May 18, 2012). ASC: The ray zone and the Tyranny of the plane. Archive from the original on May 15, 2012. Received on May 18, 2012. Make Your Own Stereo Pictures by Julius B. Kaiser McMillan Company 1955 p. 12-13. Son of Nimlso, John Dennis, Stereo World May 1989 page 34-36. Child, Ben (August 11, 2011). 3D is no better than 2D and gives moviegoers headaches, claims the study. Keepn. London. Received on June 8, 2012. Science's health problems about 3D movies - Phone News. PC management. April 20, 2010. Received on October 14, 2010. Solimani, Angelo G. (February 13, 2013). Are there side effects for watching 3D movies? Prospective Crossover Observational Study on Visually Induced Motion Disease. OOP ONE. 8 (2): e56160. Bibkod:2013PLOS0... 856160S. doi:10.1371/journal.pone.0056160. PMC 3572028. PMID 23418530. Eyecare Trust. Trust in eye care. Received on March 29, 2012. Beaumont, Claudine (July 13, 2010). Daily Telegraph newspaper. The Daily Telegraph. London. Received on March 29, 2012. Understanding the requirements for high-quality 3D video: a test in stereo perception. 3droundabout.com. December 19, 2011. Received on March 29, 2012. Comparison of eye capabilities and electronic camera. Cornreich and B. Farella, 2013 Photonics North SPIE Symposium Paper No. BIO-MED-4-P-1. June 2013 Ottawa ON, Canada - Project 3D_COMFORT-ACCEPTANCE (3D Comfort and Acceptance) - ANR - Agence Nationale de la Recherche. agence-nationale-recherche.fr - b Fleming, Mike (March 23, 2010). Michael Bay and James Cameron skeptical of 3D conversion. Jurors come out - . Deadline.com archive from the original on November 12, 2010. Received on October 14, 2010. Stereoscopic displays and XXI (2010)». Stereoscopic.org archive from the original on October 9, 2010. Received on October 14, 2010. Mark Kermode. Come to room 3D, your time is up. BBC News, 23 December 2009. Mark Kermode. Bbc News, 23 December 2009. Browning, SkyJar (June 16 - June 23, 2011). Two Ds is better than three: Hank Green finds a place in the excesses of Hollywood, Missoula Independent, Volume 22, No