

# A NEW WAVE OF SUPER 16 FILMMAKERS

## GAIN TRACTION WITH DI POST PRODUCTION

By Bob Fisher

Question: What do *Battle for Seattle*, *American Primitive*, *Ivory*, *Shortbus*, *Good Time Max*, *Parasomnia*, *Life Support*, *The Passage*, *Right At Your Door*, *Fido*, *One Day Like Rain*, *The Dukes*, *For Your Consideration* and *American Gun* have in common?

Answer: They are just a sampling of titles of a new wave of contemporary independent features produced in Super 16 film format during the past several years.

The Motion Picture Association of America (MPAA) tracked 480 U.S. feature films produced in 2006. It reported that 438 films (91.2 percent) were produced in 35 mm format, 32 (6.7 percent) in one of the various digital formats, and 10 (2.1 percent) in Super 16 film format. There are no statistics for 2007 yet, or for independent features that flew under the MPAA radar. However, there are signs that the Super 16 format is gaining traction with the convergence of film and digital intermediate (DI) technologies.

There is also a heightening awareness that film is the only proven archival medium that assures long-term, guaranteed access. The Science and Technology Council of the Academy of Motion Picture Arts and Sciences recently raised this issue in a report titled *The Digital Dilemma*. Among the notable conclusions: (1) "There is no digital archival master format or process with longevity characteristics equivalent to that of film." (2) "The cost of

there were many hundreds, maybe thousands, of 16 mm cameras being used by hobbyists, news and documentary crews and low budget/independent feature crews.

Swedish filmmaker Rune Ericson is universally credited with inventing the Super 16 format. Ericson asked Kodak to provide 16 mm test footage without perforations on the left side of the frame while he was preparing to shoot a low budget feature in 1967. That made the usable portion of the frame 45 percent larger with the same 1.66:1 aspect ratio which was the widescreen 35 mm standard in Europe.

After the movie was shelved, Ericson put his plans on the back-burner until 1970, when he modified an Éclair NPR 16 mm camera to shoot *Lyckliga Skitar* (*Blushing Charlie*) in 17.5 mm format. That was the birth of the Super 16 format, which was initially called the Runescope. European filmmakers embraced the new format.

In 2002, the Academy of Motion Picture Arts and Sciences presented an Award of Commendation to Ericson "...for furthering the mainstream success of low budget films in widescreen format by allowing cuts in production costs and shooting time without corrupting the quality of images." An Academy news release stated that more 500 feature films produced in Super 16 format since 1970 have been featured on cinema screens. The Super 16 revolution was just shifting into high gear.

storing 4K digital masters was found to be enormously higher ... 11 times higher than the cost of storing 35 mm film masters."

## The Evolution of Super 16 Technology

The 16 mm format was developed in a joint venture between Bell & Howell and Kodak during the early 1920s as an affordable option for motion picture hobbyists. The two companies initially considered developing a 17.5 mm camera, which could be used with 35 mm film slit down the middle. The problem was that the 35 mm film used by the motion picture industry had a flammable nitrate base, which could result in liabilities.

The two companies agreed that Bell & Howell would make a 16 mm camera and Kodak would manufacture a light-sensitive emulsion coated on a new, non-flammable safety base. The first new cameras came into the marketplace in 1926. By the mid-1960s,

## DI Enters the Picture

Kodak introduced the Cineon digital film system in 1991. The system included a scanner for converting film images to digital files, computer workstations and software for manipulating images, and a laser film recorder. The system was initially used to restore *Snow White and the Seven Dwarfs* and other classic films, and for seamless integration of visual effects. *Pleasantville* was the first digital intermediate (DI) on record in 1998.

Stephen Goldblatt, ASC, BSC and director Frank Pierson marked another milestone in 2001 when they collaborated on the production of *Conspiracy* in Super 16 format coupled with DI timing. The HBO movie was a faithful dramatization of a January 20, 1942 gathering of 15 Nazi bureaucrats to plan the holocaust.

Goldblatt and Pierson envisioned drawing intimate portraits of those individuals from a subjective perspective by covering the

Scenes from  
*AMERICAN  
PRIMITIVE*,  
Chris Chomyn,  
cinematographer.  
*L-R*, Actors  
Danielle Savre,  
Tate Donovan, and  
a drag  
show scene





## Cinematographer Chris Chomyn checks exposure on *American Primitive*.

*Photos by Tony Nash*



## Cinematographer Don M. Morgan, ASC lights actor Tim Draxl on the set of *Ivory*

Ivory photos by Stevie Stonehenge



## Morgan with Arriflex 416 film camera used on *Ivory*

unfolded drama with a couple of handheld Super 16 cameras. Goldblatt leveraged DI technology to alter colors and contrast in subtle ways in tune with the emotional flow of the evolving story. It was like watching a painter add the final touches to a work of art.

*Conspiracy* aired on HBO in HD format, and the digital file was also recorded out onto 35 mm color intermediate film, which premiered at the Holocaust Museum.

Today, some 20 post production facilities in the U.S. alone offer DI services.

## Recent Super 16 Project Snapshots

*Shortbus* is a contemporary story about the mores of a subculture in Manhattan. Much of the story unfolds in a dark saloon. Cinematographer Frank DeMarco and director John Cameron Mitchell shot tests with the actors using film and the most advanced digital cameras. After making 35 mm prints of the test footage, they agreed that a film-look was more flattering for the characters who are young and attractive.

DeMarco says they opted to produce the film in Super 16 format,

"The camera weighs 12.5 pounds and features an incredible optical viewfinder," Sebaldt says. "Our leading actress is young, beautiful and naturally pale. I overexposed her skin tones to make them cooler and shot some scenes at a faster frame rate for a slightly dream-like look. I also shot some scary moments in the story at four frames per second."

James Chressanthis, ASC shot four television movies in Super 16 format during the past several years: *Life With Judy Garland*, *The Reagans* miniseries, *Four Minutes* and *3: The Dale Earnhardt Story*. He made the first use in the U.S. of the new Ikonoskop A-Cam Super 16 camera from Sweden on *3: The Dale Earnhardt Story* and *Four Minutes*. The A-Cam is four inches high with a fixed 9.5 mm lens. It can be used to record six to 36 frames per second.

*Four Minutes* is the story of Roger Bannister, an Englishman who was the first human to run a mile in competition in less than four minutes. Chressanthis handheld the A-Cam on a monopod as he ran around the track with athletes in simulated competitive races. In 3: *The Dale Earnhardt Story*, the A-Cam was handheld inside a

because it enabled him to work faster and remain unobtrusive in tight spaces. DeMarco recently collaborated with Jessica Yu on *Ping Pong Playa*, another Super 16 feature film.

David Klein shot *Good Time Max* in collaboration with writer/director James Franco, who was also cast in a leading role. The film depicts a complex relationship between two brothers who follow different paths.

"Knowing up-front that we had a DI saved us precious time in production," Klein says. "I knew that, if necessary, instead of taking time to flag light off of walls and reflections off of windows while we were shooting, I could do it in DI in minutes. Though, you need to understand that you can't fix things that aren't on the negative."

Christian Sebaldt, ASC made the first use of the new ARRI 416 camera in the United States when he collaborated with writer/director Bill Malone on *Parasomnia*.

race car as it sped at 150 miles an hour around an oval track. In both of these situations, he captured breathtaking images of the action from the perspectives of the main characters.

"HBO did 35 mm filmouts of *Life With Judy Garland* and *The Reagans*, which were screened for critics," he says. "No one knew they were Super 16 films."

## Coming to Screens Near You

*American Primitive* is an original story co-written by screenwriters Gwen Wynne and Mary Beth Fielder and directed by Wynne. The budget was close to \$1.5 million. The story: After their mother dies, two teenaged sisters and their father move to Cape Cod, Massachusetts, where he makes a living handcrafting American Primitive style furniture. A family conflict evolves with the sisters' maternal grandparents.



"Gwen has been living with this story for close to 10 years," says cinematographer Chris Chomyn. "She wrote the original script while she was a grad student at the U. of Southern California. Gwen directed plays and worked on documentary projects after completing her formal education. This was her first narrative film."

Chomyn has earned around a dozen cinematography credits on independent features, since he completed an MFA degree at UCLA in 1990.

"I loved the script, because it's a drama with believable characters about a relevant contemporary issue, and it didn't feel contrived," Chomyn says.

*American Primitive* was produced in Super 16 film format at practical locations, including a house with a big picture window overlooking the bay at Cape Cod. During preproduction, Chomyn took still pictures of different rooms at various times of day to get a sense of how the sun reflected off the ocean on clear and cloudy days, and how it affected colors, shadows, light and darkness inside the house.

"I wanted to get a sense of place, because the house is like a character," he explains. Chomyn says there were aesthetic as well as budgetary reasons for choosing the Super 16 format: "Super 16 allowed me to move quickly without sacrificing the textures and details that are so important to create a believable sense of place. We want the audience to see and feel the textures in backgrounds with shallow enough depth of field to keep them focused on the characters in the foreground.

"We decided to compose images in 2.4:1 aspect ratio, which meant we were only using about 60 percent of the negative frame," Chomyn explains. "The wider aspect ratio enabled us to get inside the eyes, minds and souls of the characters without losing a sense of place in the backgrounds. Today's film and DI technologies allowed us to make that choice. We knew we would see a bit more grain than if we had shot in 1.66:1 format, but agreed that the grain would work for the story."

CSC in New York provided the camera package, which included two ARRI 16SR 3s, Canon 8:64 mm and 11:165 mm zooms, and a set of Zeiss Superspeed prime lenses. The production company rented a crane for a couple of exterior scenes.

Chomyn describes a scene on the lawn outside the house. The father has set up a display of his furniture, so people driving by can see it. A female newspaper reporter, who came to interview him, is setting up a still picture with one of the daughters watching them from a doorway. She notices that the reporter is flirting with her father.

Chomyn made a motivated dolly move coming in for a close-up shot of the reporter and father. He panned past them and finished the shot with a 1970s style "zoom" of the daughter reacting to their interaction.

"We made no effort to hide this zoom – it's quite obvious, and evokes the '70s time period," he explains. "Cinematography is like a symphony where the images and the visual elements comprise the whole, half and quarter notes and rests. There are hand-held, Steadicam, dolly and static shots with close-up, as well as medium and wide-angle compositions. We used warm, cool, hard and soft light from above and below. They are different notes that combine and contrast to create a visual rhythm."

Early in the story his lighting is realistic and motivated by the sun and practical sources. As the story evolves, the lighting becomes more interpretive.

Example: Chomyn lit the beginning of a disco scene with gold,

blue and lavender tones. When a drag show begins, the characters move into red light. Red is the color that represents the father. He drives a red car, the only red in the house is in his room, and his daughter moves into red light the moment she sees her father across the crowded dance floor. Chomyn trusts that the audience will intuitively understand.

He chose a palette of four Kodak VISION2 color negative films with distinctly different imaging characteristics that he felt were right for various scenes, but which cut together seamlessly.

A decision was made during an early stage of preproduction to do both front-end lab work and the DI at LaserPacific in Los Angeles. Chomyn explains that the facility offers an affordable, proprietary inDI™ process for scanning film at HD SR (High definition Superior Resolution, with a 4:4:4 color space) at 1920 x 1080 RGB resolution, and for manipulating images interactively in a cinema-like environment. The timed digital master file will be rendered onto film in 35 mm anamorphic format using an ARRILASER recorder.

*Ivory* takes the audience behind the scenes during a year in the lives of two aspiring concert pianists as they prepare to compete in the International Liszt Competition in Budapest, Hungary. They are polar opposite personalities who meet while competing in a piano competition in New York, and spend a year together studying at a music conservatory in Chicago before competing for the prize in Budapest.

It was 23-year-old Andrew Chan's first turn at the helm on a long-form film. Yossi Reshef, a concert pianist whom Chan met while they were students at USC, introduced him to Laurence Gingold, who wrote the script and co-produced *Ivory* with Gray Frederickson, who has produced such classic films as *The Godfather* trilogy and *Apocalypse Now*. Frederickson teaches filmmaking at the University of Oklahoma.

Donald M. Morgan, ASC has compiled some 60 credits for films produced for the cinema and television. He has earned five Emmy Awards and four other nominations for cinematography. Morgan's son and Chan were friends in high school. When Chan told him about *Ivory*, Morgan said that he was interested in collaborating on the project.

"The day after Don came onboard, we convinced everyone that this story needs an organic film-look, because it's important for the audience to make an emotional connection with the characters," Chan says. "We assured the producers we could get that look on our budget by producing *Ivory* in Super 16 format combined with a DI."

Morgan adds, "We also needed the dynamic range that film offers, because we were going to be shooting many scenes in challenging environments with dark shadows and bright highlights that we didn't want to blow out. We assembled an amazingly talented crew, but there wasn't going to be a lot of time for elaborate lighting setups."

Morgan arranged to rent two of the first ARRI 416 cameras available in the United States from Otto Nemenz in Los Angeles, along with a set of Cooke S4 prime and zoom lenses. He mainly worked with primes, "because they render a richer look."

*Ivory* was primarily produced at practical locations in buildings at the university in Norman, and in a large Masonic temple in Guthrie, Oklahoma. They also shot exteriors scenes for about a week at recognizable settings in Budapest.

Morgan watched rehearsals, and then he and Chan discussed what they wanted the audience to see and feel. That determined

how Morgan lit, composed images and moved the cameras. Sometimes, he used a Steadicam, and other times the camera was handheld, tracking on a dolly or static. If the light wasn't right for two cameras, Morgan used one. He recorded images on the 500-speed VISION2, which was shipped to FotoKem in Burbank. The lab provided DVD dailies. *Ivory* was being edited offline as this issue went to press with DI timing and a filmout to follow.

"I'd shoot a film with a \$100 million budget this way if we needed to use extraordinarily portable cameras and a little more texture," Morgan concludes.

### Preserving Your Legacy

The aforementioned *Digital Dilemma* report is the outcome of a comprehensive study based on research conducted by an impressive array of the nation's leading asset protection managers and archivists. Milt Shefter co-authored the report with Science and Technology Council Director Andy Maltz.

We asked Shefter how the findings apply to independent filmmakers who are producing projects in Super 16 format coupled with DI postproduction. He recommends archiving the entire negative in a proper humidity and temperature controlled environment. Shefter says that properly archived film will retain the imaging characteristics recorded on the negative for hundreds of years. He estimates the cost of storing a feature film at around \$25 to \$40 a month, depending upon the number of reels.

Shefter says that it is prudent to archive all the negative, because future needs are undefined. He reminds us that no one anticipated that out-takes from yesterday's classic movies would prove to be fascinating, behind-the-scenes content for today's DVDs.

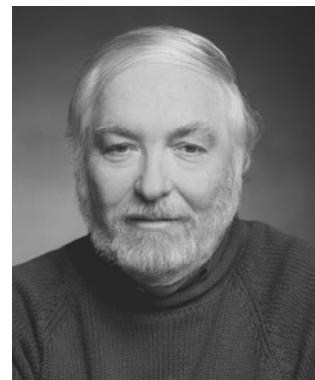
Shefter points out that it is common practice for the major studios to have labs make yellow, cyan and magenta (YCM) black-and-white separations from the final versions of films released in 35 mm format. Properly archived separations can be used to reconstruct the original color negative deep into the foreseeable future. He estimates costs for making separations for a 35 mm feature release at between \$25,000 to \$40,000.

Shefter also recommends archiving the DI master file, though he cautions that the data tapes will "most likely" get corrupted and/or be obsolete by the evolution of new technologies and formats. He says that technology vendors recommend migrating to newer formats as needed, generally every

four to five years. Shefter notes that practice may be economically feasible on a per-title basis, but it could be a heavy cost burden for independent companies which own film libraries consisting of many titles.

For additional information, including contacts for archival services, Shefter recommends visiting the Association of Moving Image Archivists (AMIA) website at [www.amianet.org/participate/listserv.php](http://www.amianet.org/participate/listserv.php)

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