

American Cinematographer



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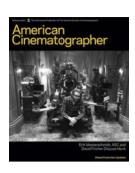
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American Cinematographer

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Erik Messerschmidt, ASC (foreground) on the set of *Mank* with (background, from left) boom operator Michael Primmer, B-dolly grip Mike Mull and A-camera 2nd assistant Gary Bevans. In *AC*'s coverage of the production, which begins on page 44, Messerschmidt and director David Fincher discuss their collaborative partnership on the project. (Photo by key makeup artist Gigi Williams, courtesy of Netflix.)

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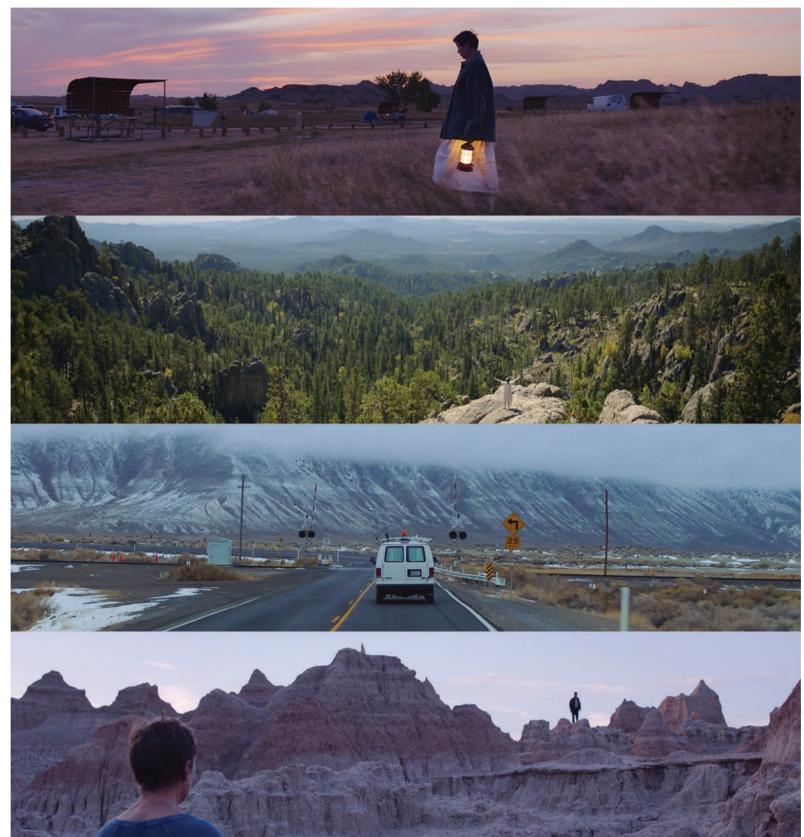
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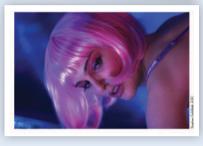
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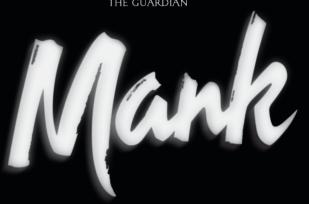
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Letter From the President



PHOTO BY MICHAEL M. PESSAH, ASC.

AS I WRITE THIS, countries are once again closing or closely monitoring borders — with limited success, it seems — reminding us once more that we all share the same planet. In this issue, with its special focus on international production, it is worth noting that the ASC is an international organization with members in dozens of countries, as well as the first such organization devoted to cinematography. Therefore, restrictions such as the closing of borders are anathema to us. Hopefully, in the U.S., we will see immigration reform bring some order to our policies.

The ASC is 102 this year, and for the past 40 years or so, as production became global and crews international, we have actively pursued membership for cinematographers of extraordinary accomplishment regardless of their country of origin (and regardless of culture, gender, religion, politics and such). We are looking forward to the point when we can get back to welcoming cinematographers to our biennial International Cinematography Summit this year (or next) at the ASC Clubhouse in Hollywood.

In 2020, life alternated between being "miserable" and "horrible," as Woody Allen succinctly put it to Diane Keaton in *Annie Hall*. Had he specifically been describing last year, Woody might have said that life alternated between incompetence and idiocy. At the ASC, we made good use of the bad time, no matter how unhappy we were, redesigning the pages you are looking at now. We also redesigned the ASC rules of governance, and at least two of our fellow cinematography organizations in other countries have asked to consult with us as they rewrite their rules, and also consider their issues of diversity. In addition, the ASC formalized our membership with the international organization of cinematography societies, IMAGO, and we look forward to engaging with our counterparts in the many participating nations.

The ASC also began the now-intensive schedule of — online — ASC Master Classes. These three-day sessions have a substantial number of international students, since traveling to the Clubhouse is not necessary. We are proud of the work Society members Shelly Johnson, Charlie Lieberman, Steven Fierberg, David Mullen, Nancy Schreiber and Gil Hubbs did in planning them, and of the very impressive contributions of our instructors so far: ASC members David, Charlie, Larry Fong, Lawrence Sher, Michael Goi, Fred Elmes, Jacek Laskus, Suki Medencevic, Phedon Papamichael, Erik Messerschmidt and Roberto Schaefer, and ASC associates Joshua Pines and Joachim Zell, along with the numerous ASC members who tuned in as ambassadors for the students to talk to — including, but not limited to, Steve Shaw, Amy Vincent and Polly Morgan.

We have in this issue stories from New Zealand, China, Mexico, Estonia and Cuba — as well as pieces on Ben Joiner, ASC and his work across the globe on *The Grand Tour*, and Steven Fierberg, ASC who shares his observations about working in France while he shot *Emily in Paris*. The takeaway, as with most things international: "*Plus* ça *change*, *plus c'est la même chose.*" We all live on one big planet.

Stephen Lighthill President, ASC FOR YOUR CONSIDERATION IN ALL CATEGORIES INCLUDING

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OUTSTANDING ACHIEVEMENT IN CINEMATOGRAPHY - THEATRICAL RELEASE PHEDON PAPAMICHAEL, ASC, GSC



WRITTEN AND DIRECTED BY

AARON SORKIN

THE TRIAL OF THE CHICAGO 7



Adventures in LEDs — Part 2: Case Studies



Groundbreaking at the time, the 2016 feature Independence Day: Resurgence was lit almost entirely with LEDs.

Last month, we covered some advanced technology pertaining to LED fixtures and color. This month, we'll look at how some filmmakers are using LEDs creatively.

John Schwartzman, ASC Prioritizes Consistency

"The directors I normally work with prefer film," says John Schwartzman, ASC. "It's only been in the last three years that I've done more digital than film, and that enabled me to become familiar with LEDs. For Last Christmas, directed by Paul Feig, we shot in London at Christmas. The city was quite beautiful and bright, but the only way we could get permission to shoot in the streets was to do it without any condors or big cables. I ended up embracing LEDs, and I even handheld a small LED myself as a key for Emilia Clarke. They're really quite wonderful.

"The problems with LEDs for cinematographers are related to dealing with the consumer/industrial variety used in store-fronts and whatnot — that's a 'Wild West' in terms of quality, and flicker can be a big issue when you have to shoot them," he continues. "You can adjust the shutter angle to stop flicker from one store and then suddenly pick up flicker from another. We also really struggled with fairy lights. Incandescent tungsten is banned in the U.K., so we could only get the LED variety, and it took a lot of testing to find the one or two that wouldn't continuously flicker on us. In the days of fluoros, sodium and mercury-vapor lights, we knew the windows and shutter angles, but in the world of LEDs there is no standard."

Schwartzman tried to manage disparity among manufacturers of professional LED

fixtures by creating "zones" of brands. "I really like what [ASC associate] Frieder [Hochheim of Kino Flo] has done with his fixtures," he says. "They're specifically color-balanced to the camera's sensor, so you can go into the fixture's menu and set it for the Arri Alexa and get amazing color fidelity. The Kino Celeb 850 is a beautiful soft source that is lovely as a key; it wraps really nicely. If I don't have the room, I go for the FreeStyle 31. I would generally use Kinos close to the talent for keys and fills, and I'd use Arri SkyPanels — especially the 360, which has significantly more punch than any Kino — for backgrounds, backdrops, pushing light through windows, and so forth. Overall, I want the same family of lights on the talent, but it's okay if I have something slightly different in the background. If it's a wide, full shot, then I can get away with a wider mix of fixtures, but when the shots get to the collarbone and up, then I want more consistency.

"It's amazing how little power LEDs require. For *The Little Things*, we were shooting a lot of nights, and I had an Arri SkyPanel 360 on a

oto by Claudette Barius, SMPSP, courtesy of Twentieth Century Fox Cor





LEDs lit up London exteriors for Last Christmas.

condor, and all it took was a little Honda puttputt generator right at the base of the condor. We didn't need three miles of cables or a big secondary generator, and that made it a lot easier, faster and less expensive!" do with the diode manufacturers finally being able to change their phosphor recipes to solve some of the problems. So many people in our industry are focused on the green/magenta shift and whether the color is on the locus,

This may be one of the technology's biggest benefits: the ability to connect all fixtures to a dimmer board and control intensity and color remotely, even with a tablet or smartphone.

Craig Kief, ASC on Improvements in Color Quality

Craig Kief, ASC often uses LEDs as his primary sources, and he served as a consultant to ETC in the development of its new fos/4 units — the company's first fixtures dedicated to feature and TV production. In prior years, however, he wasn't quick to adopt LED technology into his work. "The color quality was just so terrible," Kief recalls. "In the last two or three years, though, a lot of work has been done to improve the quality of LED emitters. It's not that the film-lighting manufacturers didn't know there were issues; it had more to

but there's a lot more to it than that. For good color rendition on camera, you need to consider the entire spectrum.

"That's what initially turned me on to ETC fixtures," he notes. "Several years ago, the company brought out a product line called Selador that had no 'white' emitters whatsoever, and I immediately saw a much better color depth. The Seladors weren't the best at creating white light for skin tone, per se, but the nuance in saturated colors was incredible compared to any other fixtures I had tried.

"With white light, there's been a lot of discussion about the high-end red part of the spectrum lacking in LED emitters," Kief

continues. "Comparing classic tungsten to white LEDs, there's always a big difference in skin tone, and ETC's research proved it was in large part due to a lack of red bandwidth in the LEDs — but it's also a lack of cyan, believe it or not. The color array we were building upon for fos/4 had been developed for the Source4 LED fixtures, and already included cyan and mint-green emitters that could be tweaked for best skin tone. The big leap forward for fos/4 was incorporating a new deepred emitter that brings much of what we've lost from tungsten back into an LED fixture. You can see the added depth in the spectrum in noticeably better skin tones, and especially so with saturated colors. Additionally, with reds, suddenly what we thought was red looks orange compared to fos/4's saturated red. These new fixtures have a color gamut that matches an unprecedented 94 percent of the Rec 2020 color space, and 98 percent of DCI-P3."

Kief also mentions metamerism, which is the ability to generate any given color with differing variations in output between colored emitters. "Another way to think of it is as a recipe," Kief says. "When you bake

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Shot Craft



Above: ETC's fos/4 LED unit.



LED illumination on Independence Day: Resurgence.

a chocolate cake, you can slightly vary the amounts of the ingredients, and in the end you will still have a chocolate cake. Metamers are similar in that once you have four or more colors to mix together, you have the ability to vary the amount of those colors in the mix and still reach the same white or color point.

"ETC's control consoles have long been able to take advantage of metamers," Kief adds. "With fos/4, this functionality has been built into the fixtures themselves so they can be taken advantage of in standalone mode as well. What this means is that the color can be tuned to three different priorities: brightest, which puts out the most intensity, but not the highest color fidelity; best spectral, which gives you the best color rendition at a sacrifice of intensity; and a hybrid mode, which is somewhere between the two."

Markus Förderer, ASC, BVK: Longtime LED Advocate

AC's piece on Independence Day: Resurgence in our July 2016 issue was one of the first articles I wrote that covered a production that primarily only used LED light. Relying mainly on RGBW LED fixtures from Digital Sputnik and LiteGear, the movie's cinematographer, Markus Förderer, ASC, BVK, could adjust any fixture's intensity and color in seconds. This may be one of the technology's biggest benefits: the ability to connect all fixtures to a dimmer board and control intensity and color remotely, even with a tablet or smartphone. Förderer continues to be a fervent proponent of LED technology, and has relied on it almost exclusively on recent projects, including Netflix's upcoming Red Notice.

"Some people think that once you get to big-budget productions, you don't have to worry about working so quickly, but I find the exact opposite is true — the bigger the budget, the less time you have," says Förderer. "Movie stars don't want to wait around. They come on-set and expect you to be ready to shoot, so anything I can do to speed up our lighting process is what I'll turn to. LEDs give me that ability. Especially when everything is LED and driven back to the dimmer board, I can make tweaks and changes extremely quickly, even between takes. I can even make slight, slow adjustments during a take! So

"Regina King's feature is simply ONE OF THE **BEST MOVIES OF THE YEAR"**

USATODAY





"Enhanced by gorgeous lighting, **VIBRANT CINEMATOGRAPHY**

and a retro-Technicolor setting, this delve into the past explores themes that still resonate profoundly today" **RadioTimes**







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NE NIGHT IN



Season 1 of The Mandalorian made use of the latest LED innovations.

when the AD looks at me and says, 'Are you ready?' I can say, 'Yes,' even though I'm still doing five or six things in the background. And by the time the slate rolls and they say, 'Action!' we're finished, but there isn't anyone running around gelling lights or carrying cables and stands. It's just me, the gaffer and the dimmer-board operator quietly talking and making whatever changes need to be made.

"I'll generally light a location with the flexibility for 360-degree shooting, and we know what to turn on or off when we look in particular directions," Förderer continues. "As the camera moves around, we'll work in dimmer cues so that one backlight dims out as another comes on, and it's seamless. I'm using a dimmer-board operator a lot like a dolly grip—he's in tune with me and the scene and can make subtle adjustments on the fly. We work to fine-tune the shot as it goes, and we make cues or design effects to follow the camera movement, thus giving the actors maximum flexibility to make use of the space for their performance.

"Recently, I've been using the Creamsource Vortex8, which I really love," he adds. "It works as hard light. There's a 15-degree beam that makes it direct and super punchy with great color. It also has a lot of light engines, meaning that different sections of the fixture can be different colors simultaneously. The array

has eight sections, so things like fire effects are much more complex than just flickering orange, then yellow, then red."

Colorist Dave Franks Grades With Light

Perhaps the most astounding use of LEDs I've seen recently was a technique employed during last-minute testing before cameras officially rolled on Season 1 of the Disney Plus series The Mandalorian (AC Feb. '20) — shot by Greig Fraser, ASC, ACS and Baz Idoine. Next to the large digital volume, the production had a small set constructed that Fraser and gaffer Jeff Webster lit entirely with Digital Sputnik fixtures. During the test shooting, dailies colorist Dave Franks came to the set to do some live tweaking of the scene's color timing — not through the camera at the DIT's station with Live Grade, but at the dimmer board. I reached out to Franks for his thoughts on this approach.

Dave Franks: "I often work with the DP to establish a look with them as early as possible in the process. And while we all know [cinematographers] can use LUTs and CDLs on-set to dial in a look for dailies, the majority of the time, outside of editorial and maybe visual effects, the dailies color — their look — isn't carried forward into post or finishing. In the digital-intermediate process, which too often

occurs with limited input from the cinematographer, the grading likely starts again from scratch. With the broad suite of tools available in today's grading software — including windows (i.e., articulated mattes) and advanced tracking algorithms, which give the DI colorist the ability to literally re-light a scene — the final look of a show may significantly diverge from the original dailies and the look the DP approved.

"There should [therefore] be some way to preserve the cinematographer's creative intent and the integrity of their image. This can happen if you balance the image on-set — not with a grading console, but actually baked-in with the lighting. The new sophisticated LEDs and lighting-control systems give you that ability. It's not just tungsten or daylight anymore, or a wash of color in the dailies grade; it's nuancing the image, with subtle, discreet color choices from specific sources, to hone the image on-set and better preserve the DP's creative vision into post and release.

"Too often, with the DP removed from the dailies or DI color conversation, we're guessing at what their intentions were [after the fact]. But if I'm there on-set, I can see what they're trying to do and know what color palette they're going for. It supports our collaboration and my shepherding of their creative vision into post. Grading live with LEDs on-set helps refine that even further; I can help polish the look for the cinematographer even before it gets recorded on the mag. This gives the DP more control over the final image from the beginning, and as a side effect, helps support the creative process with the other on-set artists and craftspeople — unveiling the look in real-time."

These are, of course, just a few examples of the myriad ways in which LED technology continues to evolve. It hasn't replaced traditional tungsten, fluorescent and HMI lighting, but it is certainly a viable choice for today's productions.

FOR YOUR ASC AWARDS CONSIDERATION

Non-Commercial Television



Episode 103 "Prime Suspect"
Craig Wright, Director of Photography



Photos by Leisbel Cano, Dan Kneece and Robert Primes,

Short Takes By Mat Newman



On location in Cuba for Piel Canela.

Revolutionary Filmmaking in Cuba

Success and artistic expression in motion pictures has long been tied to filmmakers' relationships with gear manufacturers and rental houses. Their shared knowledge and bonds have pushed generations of filmmakers to go beyond anything they initially thought possible. Writer-director Michelle Salcedo employed these relationships to produce her directorial debut, Piel Canela, which tells the story of a Cuban exile returning to her homeland after 20 years in search of the daughter she was forced to leave behind. The director knew what she wanted in the photography of the period piece, set in the Cuban cities of Havana and Viñales — the latter being Salcedo's hometown village — during 1958 and 1980, but she didn't know how to make it happen. So she sought help from her neighbor: Robert Primes, ASC.

The cinematography challenge posed by Salcedo's project invigorated Primes, who, with this production, was returning to his position behind the camera after a seven-year retirement. Taking on *Piel Canela* meant accepting two project requirements that would define Primes' equipment choices. The first

was that the four-person U.S. team (Salcedo, Primes, veteran Steadicam operator Dan Kneece, and actor Mimi Davila) would need to carry the majority of their gear into the country with them. The second requirement was even more limiting. Securing the permits from the Cuban government to shoot had taken more than a year, and any equipment they brought into the country would have to pass as something a tourist would have. If not, it could be confiscated or subjected to lengthy processing and costly temporary import fees.

Primes was initially confident DSLRs were the right fit for the project. Through his still-photography work, he had tested most of the major models, which informed his decision-making on how best to face Cuba's hot sunlight on the project's budget while dealing with unavoidable equipment and crew limitations. "I found that the modern cameras had loads of latitude in the raw still files," Primes says. "I had learned how to shoot natural light [in] any place, with no lights or white cards, and still be able to make beautiful tones."

Primes' next move was to consult with the friends he'd made during his career of

30-plus years. He went to the Los Angeles rental house Radiant Images to speak with co-founder and ASC associate member Michael Mansouri for guidance. "With filmmaking, you're just bombarded by data," Mansouri says. "How do you narrow down a decision and make sure these are the right tools that do this? The only way to judge is by other people's experiences, and that's where we feel a great rental house's leverage. They don't just let the equipment go out; they get that information back. They fight for [that information] so they can refine constantly."

For *Piel Canela*, this meant turning Primes onto new autofocus advancements recently introduced by Canon. "I [had] never seen focus tracking like this," says Primes. "I touch [my subject] in focus and then move it around to the corners where there are fewer sensors, and it holds focus. I rush in fast, [and my subject is] in crisp focus. I said, 'This really does it."

Primes chose autofocus capability over increased low-light sensitivity as his main priority in deciding which camera to use. "My needs in terms of focus pulling [were

FOR YOUR ASC AWARDS CONSIDERATION

Non-Commercial Television







significant, as] there's real action that you've

got to move to capture. This is fast and



accurate enough to track that." The choice also came with a bonus: "I can order the much-less-expensive, lighter-weight still lenses. I don't have to get calibrated professional lenses and pretend that they are still lenses going through customs." He selected Sony a7 cameras and Fujinon optics.

With that equipment secured, Primes was ready to solve his remaining gear issue: "How are we going to move the camera?" He knew the crew would be using some kind of handheld stabilizer, and his gambit was to pair it and his operator with a second operator who

ready to solve his remaining gear issue: "How are we going to move the camera?" He knew the crew would be using some kind of handheld stabilizer, and his gambit was to pair it and his operator with a second operator who would handle focus and camera controls. To help achieve this need, DJI sent over its Force Pro, which wirelessly controls the pan, tilt and roll. Picture was handled with a 7" Atomos Shogun paired with a Teradek receiver and transmitter on the camera.

Along with the Force Pro, Movi offered their Movi Pro, which is capable of auto-balancing the camera and lens with a button press, and would otherwise capably do the job — but due to its hoop design and carbon-fiber build, the stabilizer is distinctly professional, which meant Primes wouldn't be able to bring it into Cuba with him. Again, Mansouri came through while the team prepped. Primes recalls, "He saw our problem, called DJI and said, 'You know the Ronin S you showed us that's a single one-handed stabilizer, much smaller, and supposed to handle eight pounds? Could you bring it over right now?"

The Ronin S satisfied the production's movement needs but would require more from the operator. As Kneece explains, "It's not like a Steadicam, which is very precise. You can do shots with a Steadicam; it's almost like a geared head because you can really make that device balance out, and control it. [The Ronin S is] a little bit more freeform.

"I don't have dance skills, so I love the two-operator [mode]," he continues. "As somebody is physically moving, I can just look at a monitor, and, as with a geared head, I can do perfect framing. As soon as you get motors and electronics and things involved, it puts you at a less intimate level, but it can also do great things."

Doing camera tests at a rental house comes with the benefit of shared big data with both the in-house technicians and the other filmmakers using the facility. At the time Piel Canela was prepping, writer-director David Ayer (Training Day, End of Watch) happened to be testing for an upcoming shoot. He helped Primes and Kneece with balancing and rigging the Ronin, using his own experiences with a Ronin/Canon 5D combo. "Mansouri had one of our 5Ds bare bones on the Ronin, and David, who's brilliant, said, 'Yeah, but the balance is too low. You need to bring it up right here." recalls Primes. "And he was right, because if the handle is down, all the inertia is leveraged up away from your grip. [He said], 'If you hold it here at the nodal point, the weight is nothing. It's much better.' And he was also totally right on that. Then, when we were rigging, he said, 'Let's take those, and we can remove the battery.' And then we were redesigning the whole thing. David was leading. I didn't recognize him as a director. I thought he was a real sharp operator — as sharp as my operator, who is plenty sharp.

"David was asking me about the shoulder latitude and if there was a sweet spot in the camera. I said I hadn't seen the test yet, so we exchanged numbers. He wanted to see our test, and I said that I'd love to see his."

The test results would nearly scuttle their entire camera plan — leaving Primes to briefly conclude, "This kills the idea of shooting natural light." And yet, the cinematographer says, "It was the most successful test we could have performed. That test saved the whole production."

For the full version of this article, detailing Primes' dilemma and Canon's solution (which involved the company's EOS C200), visit ascmag.com/piel-prep.





Non-Commercial Television



Episode 104 "The Fabulous Birchwood Boys"
Tom Magill, Director of Photography







Martin Ruhe, ASC and director George Clooney frame sci-fi thriller The Midnight Sky.

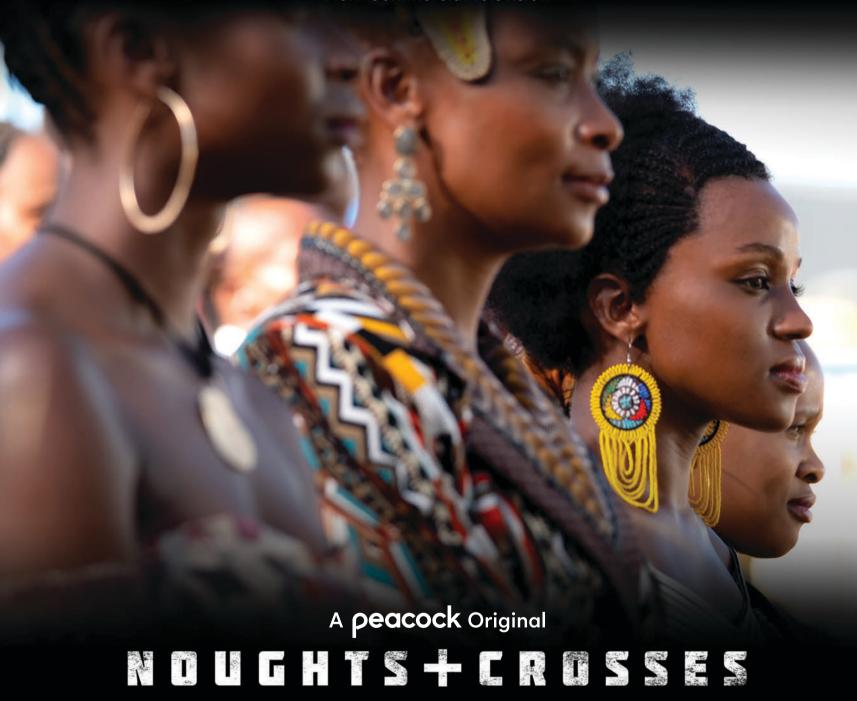
By Noah Kadner

hile The Midnight Sky — shot by Martin Ruhe, ASC and directed by George Clooney — is a post-apocalyptic science-fiction epic, at its core it is an intimate character study. Based on the novel Good Morning, Midnight by Lily Brooks-Dalton, the film juxtaposes the journev of a crew of astronauts aboard the space-

craft Aether returning to Earth from a mission to K-23, a habitable moon of Jupiter, with the efforts of scientist Augustine Lofthouse to contact the crew and prevent them from returning home following a global catastrophe. Lofthouse, who lives on a research base in the Arctic — and is possibly the last person on Earth — suffers from a terminal disease, which requires regular transfusions to prolong his final days. As he

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Non-Commercial Television



Episode 2

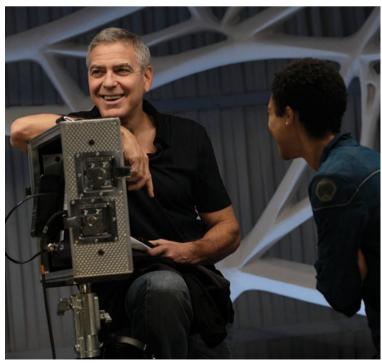
Jamie Ramsay, Director of Photography



"You can't fake the scope of riding a snowmobile across the top of a glacier. You just can't make everything digitally, and for the actors, myself included, you need that degree of cold and loneliness to have everything feel authentic."

Scientist Augustine Lofthouse (Clooney) and the mysterious Iris (Caoilinn Springall); the actordirector on set with co-star Tiffany Boone.





endeavors to communicate with the *Aether* crew by finding a more powerful antenna, he must also overcome the harsh conditions of the Arctic.

The Midnight Sky is the third collaboration between Ruhe and Clooney, the latter of whom also stars as Lofthouse. Their other work includes The American and the miniseries Catch-22, which Clooney starred in and directed, respectively. "George and I were at the premiere of Catch-22 in Los Angeles, and he invited me to work on his next project," Ruhe says. "He explained that the story was like a mix of The Revenant and Gravity, and I thought that sounded great. He also referenced On the Beach."

Says Clooney, "Martin's been shooting beautiful films for a long time, and it was really clear for me as a director what a gifted cinematographer he is. We talked about how to capture the size and scope of the locations. Because it's also a meditative piece, we looked for ways to get inside the characters' heads." To accomplish this, Ruhe selected Arri Alexa 65 and Alexa Mini LF cameras paired with detuned Arri Prime DNA and DNA LF prime lenses, respectively. The lenses, Clooney says, "were amazing because the focus was different on characters [who were] next to each other. We also wanted to shoot a lot of handheld so you'd feel as if you're there with the characters."

"We used mainly DNA lenses and had them detuned to our liking to give them more character — they're designed for it," says Ruhe. "We also used a special 58mm lens from Arri called the 58T, the only one of its kind; with it, only the very center of the frame is in focus, and everything else falls off very rapidly. We used it when we wanted to be in a character's head, in their mind space. One example is when Maya [Tiffany Boone] sees the first droplet of blood floating around in her helmet during the spacewalk. Another is when Sully [Felicity Jones] is on her own in the communications pod, contemplating things."

The key crew included Ruhe's longtime gaffer, Julian White, as well as rigging gaffer Tommy Royal and console operator Simon Baker. Ruhe also collaborated closely with production designer Jim Bissell and visual-effects supervisor Matt Kasmir.

On the Glacier

Principal photography took place November 2019 through February 2020, with production beginning on location at the Vatnajökull glacier in Iceland, which stood in for the exteriors of the Barbeau Observatory and research station. "We built the entrance to the station right off the glacier so you could film someone entering in Iceland and then cut to the studio," Bissell says. "When we first started, we considered places like British Columbia or Norway, which have beautiful vistas, but you need a helicopter to get to [them]. Iceland is much easier to access, and [Vatnajökull is] the largest glacier in Europe."

Shooting on location in a harsh environment was essential to Clooney because of the realism it provides both the actors and the audience. "You can't fake the scope of riding a snowmobile across the top of a glacier," he says. "You just can't make everything digitally, and for the actors, myself included, you need that degree of cold and loneliness to have everything feel authentic."



"A CALLBACK TO THE GOLDEN AGE OF HOLLYWOOD"

The New Hork Times

"SUMPTUOUSLY OLD-SCHOOL CINEMATOGRAPHY FROM DECLAN QUINN"

VARIETY

"DECLAN QUINN'S DAZZLING STYLIZED CINEMATOGRAPHY"

Hollijwood

AMAZON ORIGINAL MOVIE

SYLVIE'S LOVE



"George didn't want to use the typical industrial vocabulary you see in most sci-fi movies today."



"Because the conditions were rough, we worked mostly with natural light," recalls Ruhe, who adds that the production supplemented the crew with a local team when on location, as well as with a DJI Inspire drone crew. "I remember often looking down at a frozen light meter. We had to stop shooting George whenever we couldn't see his eyes because they were covered with ice. In many of the shots, his beard looks frozen, and it really was."

On the Virtual Stage

The production then moved to Shepperton Studios in the U.K. for the majority of its visual-effects scenes. To depict the frozen tundra visible through the arctic interiors' windows, the production deployed the StageCraft LED wall in-camera visual-effects process pioneered by Industrial Light & Magic (ILM) on the Disney Plus series *The Mandalorian (AC Feb. '20)*. For the background imagery, Kasmir oversaw the capture of live-action footage from an array of five Alexa Minis in Iceland. "We shot various times of day and various weather conditions," Kasmir says, "and as luck would have it, we captured the only snowfall that occurred on the glacier during the production. We also did photogrammetry and Lidar surveys of the environment, which provided data essential to generating a dynamic 3D re-creation of the environment onstage. After stitching everything together, we ended up with about 270 degrees of imagery. Then ILM used Unreal Engine to [display] that material onto

an LED wall that was approximately 130' long and 30' high outside the windows of our sets."

Ruhe agrees that the StageCraft process brought yet another layer of realism to the cinematography. "There's a shot when Lofthouse is in the control room drinking coffee in the morning and looking out the window. All those reflections in his eyes and on the set are in-camera and real. We used the LED wall to achieve those reflections and basically light the set itself."

"The wall was amazing," Clooney says. "I'd never seen anything like it. We had witness cameras every 8 feet or so on the stage to monitor and track our camera. If we were on a dolly and boomed up, it would immediately read that and change the perspective outside on the wall to match. You were lighting by the actual scenery, which allowed us to move much quicker and saved us a lot of work we would have had to do in postproduction. It was a great luxury to have that incredible setup."

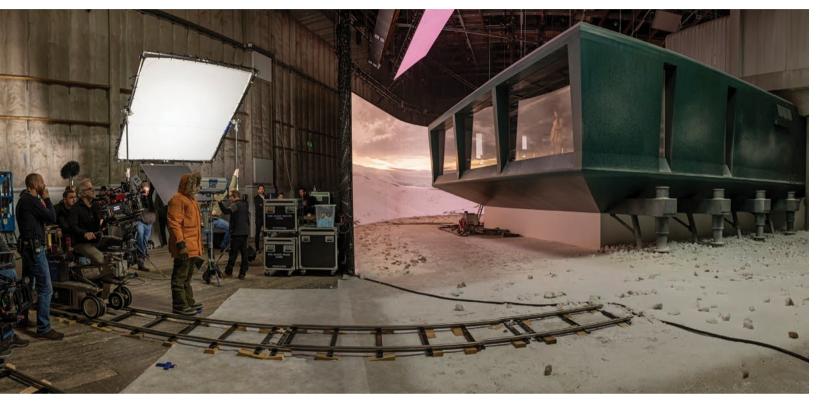
Classic Technique

Although *The Midnight Sky* production team embraced many state-of-the-art virtual-production techniques, it also deployed traditional methods when appropriate. Examples included arctic exteriors captured onstage that often involved underwater work and elaborate stunts. To create a believable sky indoors, White surrounded the set with an enormous gray Rosco rear-projection screen — a technique, he says, that



"When our Iceland location manager visited us at Shepperton, we showed him something we'd shot that morning, and he was convinced it was footage from Iceland!"

A creative blend of projection techniques and LEDwall panels helped simulate the Arctic on stage.





Haris Zambarloukos, BSC used on Mamma Mia!

"It's tough to create a skydome inside a studio, especially if you're using tungsten or HMI units, because you're always going to feel the source," White says. "We ordered 490 Arri SkyPanel S60s and 180 feet of the Rosco material and used them to create a huge, vertical soft-box cliff face, which wrapped [light] very naturally. We [controlled the intensity in] sections; off-camera [the screen] would be to exposure, and behind the actors it could be under[exposed] or a night sky. Sometimes we lit just the top row to create an edge light. As we also had the roof rigged with SkyPanels behind Grid Cloth, it [created a very realistic effect]. It works well on camera, especially when the background is defocused."

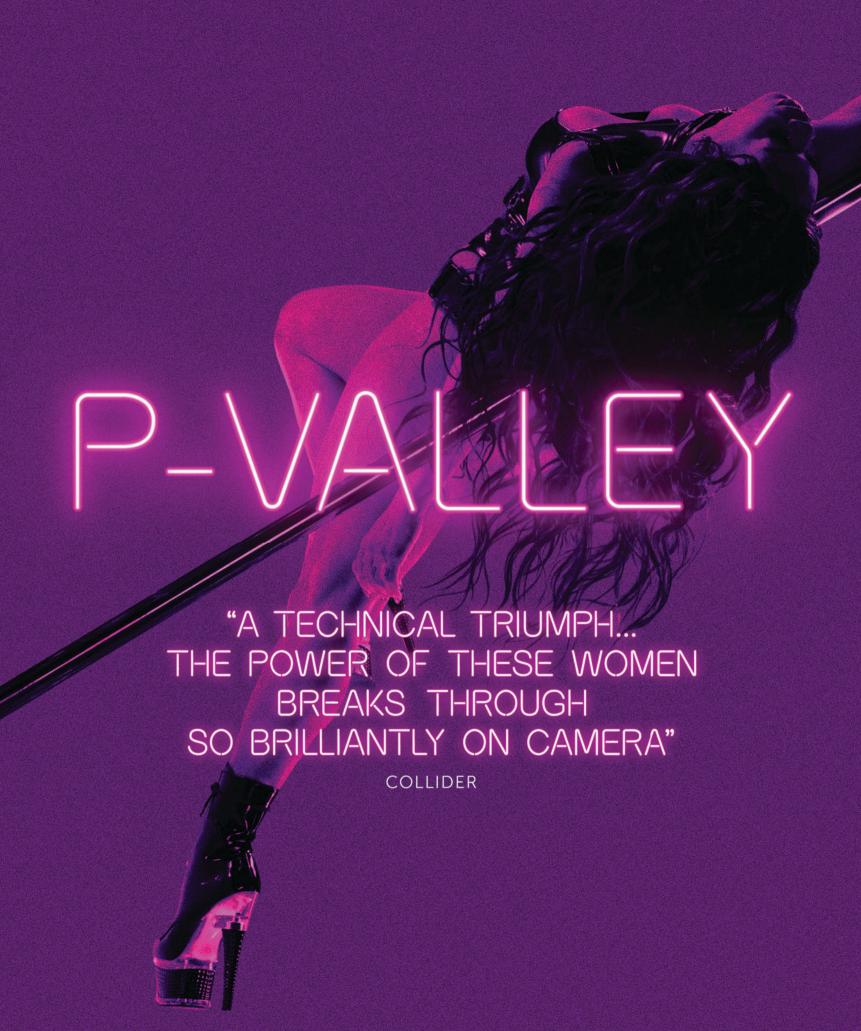
With the Rosco screen, Ruhe says, "We could also feed footage directly into the SkyPanels as RGBW data to create special lighting effects. You could make a specific blue sky, modulate a snowstorm or whiteout, and simulate the effects of the aurora borealis."

"To create the sun's look in a snowstorm, we used a Sumolight, a cluster of seven large-lensed LEDs in a hoist," White says. "It could travel backwards and forwards on an I-beam, allowing us to move it anywhere behind the Rosco. The postproduction team said the process saved a fortune [because] we didn't have to do everything [in post]."

Says Ruhe, "When our Iceland location manager visited us at Shepperton, we showed him something we'd shot that morning, and he was convinced it was footage from Iceland!"

The cinematographer notes that postproduction did play a significant





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DIRECTOR OF PHOTOGRAPHY EPISODE 101 - "PERPETRATIN"







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RICHARD VIALET

DIRECTOR OF PHOTOGRAPHY EPISODE 104 – "THE TRAP"



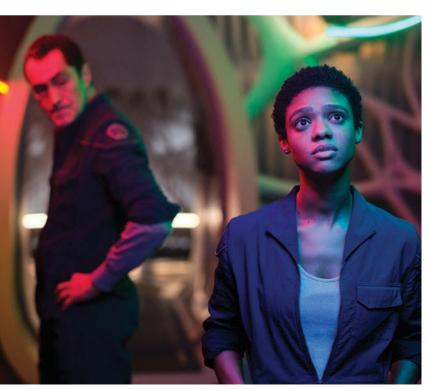
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"A computer generates [spaceship structural] designs that indicate exactly where material needs to be to respond to the physics and stress that are going to be exerted on it. You get these exquisite, organic forms that are like Gaudí on acid. It's very cool!"



The spaceship-interior design was based on research into emerging technologies.



role, "adding landscapes and photoreal elements into the background."

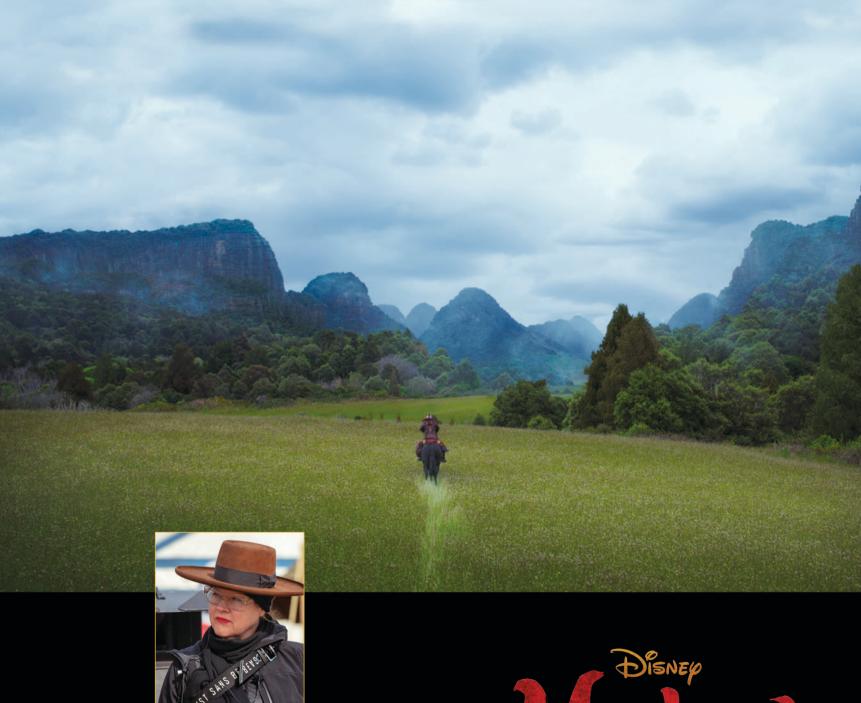
An Inviting Spaceship

For scenes onboard the Aether, "George didn't want to use the typical industrial vocabulary you see in most sci-fi movies today," says Bissell. The production designer, who co-designed the iconic spacecraft in E.T. the Extra-Terrestrial (AC Jan. '83) with Ralph McQuarrie, sought an organic and inviting spaceship. "We envisioned a ship 30 years in the future which embraced two emerging technologies: topological optimization through the use of 3D printing, and expandable habitats. Expandable habitats involve layered fabric structures used to contain atmosphere and protect the crew from radiation. Unlike prebuilt modules, they can be efficiently manufactured and transported into space. Topological optimization is an engineering technique, which could be used to design and then 3D-print an exoskeleton used to tether the habitats as they spin around the spacecraft, creating artificial gravity through the use of centrifugal force. A computer generates designs that indicate exactly where material needs to be to respond to the physics and stress that are going to be exerted on it. You get these exquisite, organic forms that are like Gaudí on acid. It's very cool! The Aether has a visible endoskeleton and exoskeleton, which support the infrastructure and protect the astronauts as they hurtle through space."

A standout sequence involving the *Aether* features the astronauts making repairs to their communications equipment via a zero-gravity spacewalk. The action was shot on portions of a full-sized exterior set piece. "We didn't shoot bluescreen for the spacewalk," White says. "Instead, we put up a large black backing and shot with one Arri M90 9K HMI to simulate directional light coming from a distant sun. The ship has a latticework solar shield in front, which we simulated with an 8'x4'

"MANDY WALKER'S CRISP CINEMATOGRAPHY MAKES THE FILM 'MULAN' FEEL VITAL."

- Indiewire • Kate Erbland



BEST CINEMATOGRAPHY
MANDY WALKER, ASC, ACS



Tech Specs:

2.11:1 Digital Capture

Cameras: Arri Alexa 65, Alexa Mini LF Lenses: Arri Prime DNA, DNA LF

"Between Martin and the visual-effects team," Clooney says, "we made an elegant and beautiful film."

A believable on-stage Arctic sky was created by surrounding the set with an enormous rear-projection screen.





gobo. We also made 20' 'bogeys' on wheels with Grid Cloth and SkyPanels and used them to create edge light and/or fill depending where the actors were placed along the hull."

Big Changes

The crew shifted to La Palma, Spain, which is part of the Canary Islands, for flashbacks in Lofthouse's life and the surface of K-23. "We changed the colors and rebuilt the vegetation, but we still needed the topography to make it work," says Clooney. "La Palma had all that as well as a nicer climate than England in February. We needed it to be warm and beautiful. [Real] locations make all the difference in the world."

The restrictions mandated by the Covid-19 pandemic meant the filmmakers had to complete postproduction in quarantine conditions. Clooney and Ruhe worked remotely with editor Stephen Mirrione. "I was supposed to remain involved in reviewing visual effects throughout post, but the situation prevented much of that," Ruhe says. Through Zoom and Streambox, he adds, "I was able to look at visual effects in London a few times and stay in the loop."

Due to travel restrictions, the final color grade was also completed remotely. "I was at Company 3 in London, and [ASC associate] Stefan Sonnenfeld was at Company 3 in Los Angeles," the cinematographer says. "George reviewed shots in L.A. as well. We'd talk and work our way through. It was not ideal, but amazingly, it all worked out."

Regardless of unexpected circumstances, Clooney speaks highly of the collaboration. The final look was "everything I could have hoped for and more," he says. "Between Martin and the visual-effects team, we made an elegant and beautiful film. A lot of this movie has no dialogue at all, so the cinematography, score and visual effects have to walk us home. I'm thrilled with the final product."

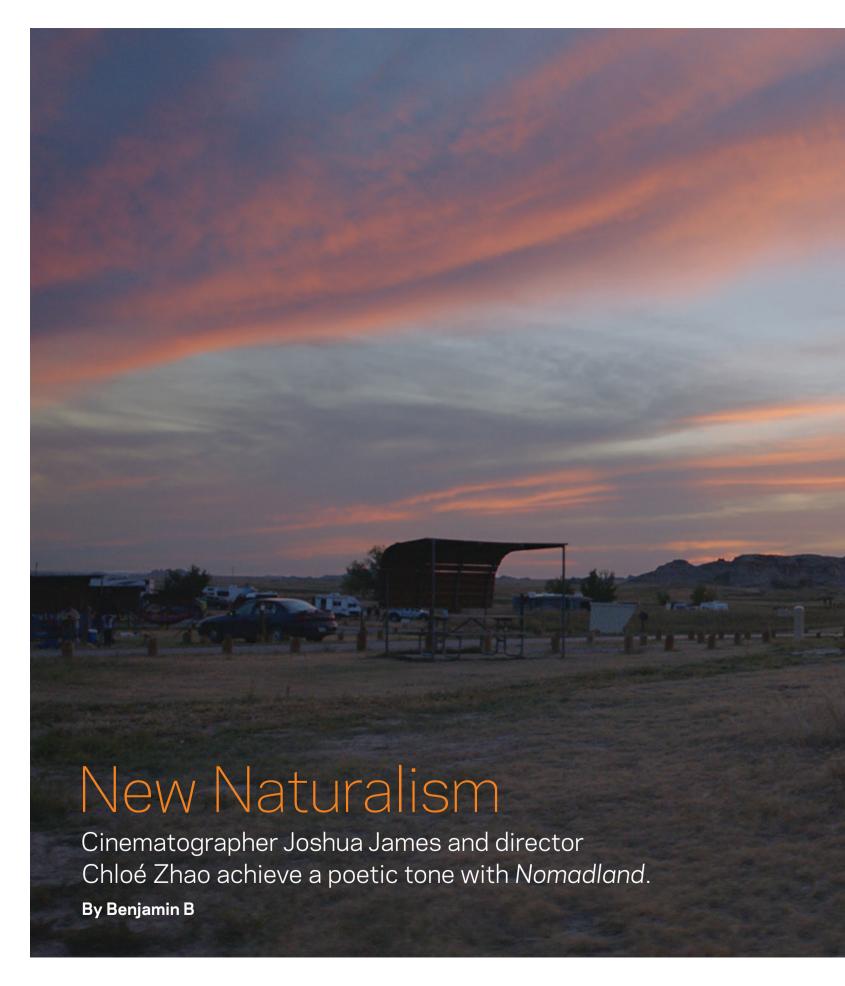
Looking Forward

"I love this film because it gets the right emotions across," Ruhe says. "It's a pity more people won't be able to see it on a big screen because it looks fantastic, and seeing it that way is so much more immersive."

He adds, "I believe we'll all go back to shooting movies on location once the health situation improves. I learn so much from every international crew I get to work with. It's a tremendous gift, and I hope we'll get back to a place where we can work normally again."

With its themes of human endurance and global catastrophe, the added dimension of premiering *The Midnight Sky* on Netflix instead of in theaters, due to a worldwide pandemic, was not lost on Clooney. "When I was growing up, we lived under the constant threat of a nuclear exchange between the Soviet Union and the United States," he says. "We've long had the understanding that if we ignore science or we ignore doctors, terrible things can happen. We live on a fragile planet, and we need to do a better job of taking care of it." Φ







otos courtesy of Searchlight Pictures

"I brought many aspects of Frances' own life into Nomadland."

Top: Nomadland director Chloé Zhao and cinematographer Joshua James Richards confer on a shot of Fern (Frances McDormand). Bottom: Zhao speaks with McDormand.







A recurring theme in Malick's work is that human encounters with nature are transformational, transcendent events. Natural light is itself so important to these movies that it can be seen as a leading character, embodying the presence and diversity of nature. In an age of increasingly virtual, computer-generated images, New Naturalism offers an alternative cinema. Whereas many other filmmakers have adopted the visual language of New Naturalism, Zhao and Richards are evolving this movement with their inclusion of real people. With *Nomadland*, they invite viewers to experience the healing power of empathy in a scattered community of kindred souls and the mystery of a grieving woman's epiphany in the desert.

AC: You have a unique way of creating the screenplay. Instead of starting with a story, you meet real people, get to know them, write a screenplay based on them, and then ask them to play themselves.

Chloé Zhao: That's the way I explore. I was lucky enough to meet these unique individuals who became guides for me, and it would have undermined that process if I'd favored story over a portrait of them. On the reservation, I met a kid named John Reddy [for *Songs My Brother Taught Me*], and that's when the character was created. Being a Lakota living on the reservation is only part of John's identity. The most important thing to me is who he is as a unique individual, a young man coming of age. And it's the same for Brady in *The Rider*, and for [the characters in] *Nomadland*. These are individuals with universal human struggles.

Joshua James Richards: On *The Rider*, Chloé started by wanting to [immerse] an audience in this young, gifted horse trainer's experience. She wrote the script with that idea in mind by delving into Brady's life, taking me with her, getting Brady used to the camera, to the filmmaking, to our collaboration. We're not coming in as a film crew; we're interested in having an experience with him. The psychologist Carl Rogers speaks of 'unconditional positive regard' — in other words, listening with love. To me, that's filmmaking.

A key difference is that in *Nomadland*, you created a completely invented character played by an actor, Frances McDormand.

Zhao: Invented, but at the same time there was a very strong collaboration with Frances, similar to how I collaborated with John and Brady. I brought many aspects of Frances' own life into *Nomadland*. She and I agreed that was the only way we could work: to get her character into a world where everyone is playing a version of themselves.

When you say that true filmmaking tries to get at the heart of a question, it's not just about naturalist filmmaking, but also about the goal of your project.

Zhao: For me to make a film, I have to know it will mean something to me, help me grow as a person. So that becomes a very crucial thing when deciding to do a project. It doesn't matter what genre, because filmmaking is really a way of living, and life is short. [*Laughs*.]

Can you discuss what these questions and themes are in Nomadland?

Zhao: On a personal level, not just as a filmmaker, but as a viewer myself, it would be the importance of solitude. Solitude in nature. And

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BEST CINEMATOGRAPHY SEAN BOBBITT, BSC













"The images need to give you a sense of Fern's inner world."

Nomadland is the third feature on which Zhao and Richards have collaborated.





also that feeling of being part of something much bigger than ourselves. Looking at a rock, a desert, a landscape — things that have been here way before us and will be here long after we're gone. It's the dirt underneath our feet; that's where we come from, and that's where we'll end up. Sometimes we forget that these days, [as we sit at] our computers. When you're standing in that landscape, nothing else defines you except that you're part of it. Nothing matters because you're part of this cycle of life, it comes and goes, everything is decided. It's a very humbling feeling, and I think that's something we all need [to feel] as a species.

How is the experience working as partners and collaborators?

Zhao: To be honest, it's not always a sunny sky. [*Laughs.*] I know that the stronger the collaboration is, the more friction there will be. When you get comfortable with someone, it gives you the space to push yourself. Josh and I really pushed each other on the three films we did together. The most important thing is: Do you agree on how you want to conduct yourself in the world as a human being? Josh and I have always been on the same page regarding how we present ourselves when we go into people's lives, making films this way.

With respect for the dignity of the people you shoot?

Zhao: Yeah, because when you have that, it shines through in how you film them. I think an operator should have that kind of empathy for a person when their light shines. That's how they can see this individual even in the darkest times. Josh has that empathy, and that's what makes him a great cinematographer.

Richards: Chloé and I have formed a really close bond both personally and through the experience of making these films. We're on an exploration together. I really trust Chloé. I'm not sure I trust myself, but I do trust her. [Laughs.] She is digging a little deeper than other directors. The images need to give you a sense of Fern's inner world, but you also have to make the images sing. All of Chloé's films are really about identity. Who are you when you lose your town and all these things that society says are 'you'? When it's just you and the four walls of a van, you really find out who you are.

What size crew did you have, and how do you approach the work on set?

Richards: On *The Rider*, we were six. With *Nomadland*, we had about 25 key people. Chloé is very careful; we cast the crew in the same way she casts the actors. I would like to mention my AC, Charles Bae; my gaffer, Matthew Attwood; and our art director, Elizabeth Godar.

Chloé does a broad shot-list, so there's a pretty solid plan at the beginning of every scene. We both know what she needs in the edit. Sometimes I don't even cut the camera, I just move quickly to get the moments Chloé wants. We're constantly looking at each other. It's unspoken — I kind of know [what she'll want].

There's a lot of natural light in Nomadland.

Richards: We used available light as much as possible and practicals inside. We stuck to that for 90 percent of the film. It was really fun to take the audience from those hundreds of miles of Badlands in either direction into the cocoon of Vanguard and the little paper lamp.



Tech Specs:

2.39:1 Digital Capture

Cameras: Arri Alexa Mini, Amira Lenses: Arri/Zeiss Ultra Prime

Fern travels the American West.









Zhao: From very early on, I made films so cheaply that we had nothing in our favor but the light in the sky and the freedom of time. So if I can't put on a huge production, I'm going to wait for those 20 minutes [until the light is perfect]! No matter how much money you have, it's very hard to get that light right.

Do you feel you are evolving Malick and Chivo's "dogma"?

Richards: One-hundred percent. When I came out of *Tree of Life*, I collapsed on the sidewalk — I was making a show for my friends — and I was like, "This is it!' I hope one day to have Chivo's kind of vision and sensitivity to light. But obviously, you have your own sensibility and your own aesthetic. Malick's world is pristine, a world in which God exists.

Zhao: Terry's films have such a huge influence on Josh and me. Beyond all these things we learn from him, like shooting at magic hour or with wide-angle lenses, the most important thing is what cinema really means to a filmmaker. Terry needs to explore something he wants to understand about the world, about human existence, and that shines through his cinema. In my first three films, I'm asking these questions as well.

Nomadland has real people with real wrinkles. Clearly, Frances McDormand was ready to play with the camera quite close.

Richards: The film is really Frances' face, isn't it? One critic compared her face to a national park. Her face is lit every possible way in this movie. I shot all the close-ups with a 32mm [Arri/Zeiss] Ultra Prime [paired with Arri Alexa Mini and Arri Amira cameras], and I did get close. Fran was a collaborator all the way. There wasn't a makeup artist on set. Chloé and I are kind of challenging that approach to filmmaking. We want to see these people as they are because they're beautiful.

The characters are often beautifully transformed by the sky, which is another character. In sunlit exteriors, you often resort to sidelight or backlight.

Richards: Backlight separates people from the background, creating depth. In a natural environment, you get a blue bounce from the blue sky. To wrap that lighting, it feels more natural to use a blue bounce. That's probably something I learned from Chivo. It feels more organic than an eyelight [fixture, which this technique provides, but with natural light].

Those moments, when the sun is gone but is bouncing up into the sky, are special and precious. We try to be somewhere quiet and intimate, like following Fran [and her friend] Swankie through the desert as Swankie is talking about the twilight of her own life. These things feel spiritual to me, even though I'm not a spiritual person. Those are the best parts of life, when you find yourself in a moment where everything seems to come together. **O**

For more coverage of Nomadland, visit ascmag.com/blog/the-film-book.

BEST PICTURE

BEST CINEMATOGRAPHY

CINEMATOGRAPHY
Alwin H. Küchler, BSC

MAURITANA

Directed by **Kevin Macdonald**

Screenplay by M.B. Traven and Rory Haines & Sohrab Noshirvani Based Upon the Book "Guantánamo Diary" by Mohamedou Ould Slahi

"TRIUMPHANT.

A mighty, timely and inspiring film."

CLAYTON DAVIS, VARIETY

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Erik Messerschmidt, ASC and director David Fincher discuss their creative collaboration on Mank.

By Stephen Pizzello

ank frames the origin story of *Citizen Kane* from the perspective of screenwriter Herman J. Mankiewicz as he's hit a low point in life. Alcoholic, world-weary and hobbled by a broken leg sustained in a car crash, Mankiewicz is trundled off to a dusty desert cottage in Victorville, Calif., accompanied by a nurse and a typist tasked with keeping their cantankerous patient off the bottle so he can complete a screenplay for Orson Welles — a script that will serve as the foundation of *Kane*.

Pressed by Welles to finish the project, the bedridden "Mank" (as he's known to his friends and colleagues) struggles to find creative

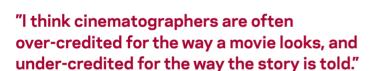
inspiration, eventually drawing upon his memories of businessman, newspaper tycoon and politician William Randolph Hearst. Flashbacks transport us back to Mank's headier days as a handsomely paid Hollywood scripter. After amusing Hearst with his barbed wit on a movie location, Mankiewicz is invited to mingle with members of the mogul's inner circle and renews a friendship with Hearst's mistress, actress and comedian Marion Davies. Mank's Hollywood career is thriving, and his social standing is on the rise, but his proximity to power allows him to observe its corrosive influence firsthand — souring his worldview, but ultimately informing the plot of *Citizen Kane* and the sardonically unflattering portrait of its Hearst-like protagonist, Charles Foster Kane.

The script for *Mank* was initially fashioned by director David Fincher's father, Jack, a journalist and screenwriter, who empathized with Mankiewicz's plight and leaned into the controversial assertions of film critic Pauline Kael, whose 1971 essay in *The New Yorker*, "Raising Kane," maintained that Mankiewicz was almost entirely responsible for the *Citizen Kane* screenplay, with little input from Welles. (That thesis has since been partially debunked by Welles supporters, including director and former film critic Peter Bogdanovich.)

Following his father's death in 2003, Fincher retooled the *Mank* script with the help of screenwriter Eric Roth, making it less antagonistic toward Welles. "I never felt that the film should be a posthumous



Opposite page: Backlight provides a melancholic ambience. This page, top: Mank (Gary Oldman) has a friendly reunion with actor Marion Davies (Amanda Seyfried). Right: Erik Messerschmidt, ASC on set.



arbitration — that's never been of interest to me," Fincher told AC during a 90-minute Zoom interview that included Mank cinematographer Erik Messerschmidt, ASC. "What was interesting to me was that it's [essentially] Rosencrantz and Guildenstern Are Dead — here's a guy in the wings, and it's his experience of this situation. What I found fascinating about Mankiewicz was [that] 30 percent of his output as a professional screenwriter in Hollywood was uncredited. And for one brief, shining moment — on a movie he did when he was old enough to sign a contract and understand the terms expressly — he said, 'No, no, no — I don't want this one to get away."

The following Q&A is excerpted from the magazine's conversation with Fincher and Messerschmidt about the Netflix project.

AC: How would you describe your working dynamic together, and the evolution of your creative relationship?

Fincher: What's great about Erik is that he's a leader and a concise communicator. But he's also a flexible thinker — he's not somebody who's proprietary. He assesses what's in front of him, and then he goes to work.

Messerschmidt: I had seen Jeff [Cronenweth, ASC] work with David, and I had witnessed that relationship work well. Prior to becoming a cinematographer, I was working as a gaffer, and part of that job description,



I think, is learning to assimilate and anticipate what people respond to and how they see the world, and then doing your best to fill in the gaps and figure out how you can be a supportive partner. I think that skill has really helped me as a cinematographer. David has a very specific way of seeing the world, and I think I see it in a very similar way, so it doesn't take very long for me to understand what he is articulating.

Fincher: It's good to be concise, and we try to communicate in the least amount of words, or in the least amount of time and the fewest number of interactions.

There's a perception, David, that you're a perfectionist on set. How would you address that notion?

Fincher: It's not about chasing perfection; we're trying to do the best with what we have in front of us. In my way of thinking, let's take away everything that doesn't work — from glitches and flares to bumps in the track or an unnecessary head turn. Let's cleave all of that stuff away so that we're just showing what we need people to see, and then move on. Let's get rid of the distractions.

Do you still leave room for what ASC member Conrad L. Hall referred to as "happy accidents" — embracing the unpredictable occurrence in a creative way?

Fincher: Connie was a very wise man. Richard Edlund [ASC] says that, too, and I think it's really true. Quite honestly, that's what we're trying to

MGM studio head Louis B. Mayer (Arliss Howard, center) explains "the real magic of the movies" to Mank and his brother, Joe (Tom Pelphrey, right).



do while we're shooting so many takes. We're not just doing it to antagonize the Screen Actors Guild, you know? You're doing it to say, 'Okay, that's a perfectly serviceable version of the scene, but now let's do it a little faster,' or 'How fast can the actor say all of the lines, and still feel as if they're saying it for the first time?' If you give someone 14 or 19 shots at it, I guarantee you'll have three or four mistakes that will be really interesting. So I guess [my approach] is a further extension of what Connie was talking about, or what Welles was talking about when he said, 'A director presides over a series of mistakes.' I'm forcing that - I am not trying to make it perfect. I'm trying to find those little moments where something interesting happens.

It happens frequently that actors stop themselves in the middle of a take. On *Fight Club*, Edward Norton had reams of on-camera dialogue and also a lot of voiceover. We would pre-record his V.O. so we could play it back. And I realized that almost every time he got on a tear and sort of lost his footing, he'd cut it short and say, 'Oh, I'm so sorry, let's stop for a sec.' But I would take him over to the video monitor and tell him, 'Look what's happening on your face as you *fall forward* — you're in freefall at this moment, and you're panicking, but look at what's happening.' And he was like, 'Wow,

that's interesting.' And I would say, 'Yes. Do not edit yourself. We're trying to capture that moment when you're falling forward and catching yourself. That's what we're here to do.'

On *Mank*, Amanda Seyfried proved to be a person who can't wait to try something completely mad and inspired the next time around. And that's when it's fun.

At the climax of *Mank*, Gary Oldman delivers a tour-de-force monologue during a dinner-party sequence that lasts nearly six minutes. How tricky was it to nail that scene?

Messerschmidt: We had a pretty good idea of what the coverage was going to be before we rolled, because we had rehearsed it extensively — we didn't wait till we rolled the master and then ask, 'Okay, what do we do next?' We had three cameras on it, and the operators were all kind of handing off to each other — it's not really a scene where we could have shot continuous coverage, but fortunately, we had the benefit of cutting away to the other characters, who are in disbelief over what's happening in front of them.

Fincher: We'd rehearsed the scene for a day — actually, two half-days where we'd run the dialogue and gone through it. Wandering around in front of Gary with a Steadicam didn't seem like the right approach — we wanted it to feel like a merry-go-round, you know, 'Oh God,

here he comes back around again.' We knew the direction that the Indy 500 was going to go in, so it was really a question of figuring out where to put the marks on the floor — you know, 'This is where you're going to stop and try to light your cigarette in a walk-in fireplace.'

Messerschmidt: We liked the idea of him orbiting around Marion.

She's also lit to have a special glow, which makes her a focal point of the scene. What were the other logistical challenges of that sequence?

Fincher: Listen, if you ever get to the set and you feel like, 'We don't have what we need in order to pull this off,' then you have totally wasted the entire preproduction phase. The battle's won in prep. You could easily derail the making of that scene if people lose confidence in what you're doing. You have two dozen thespians at the table, and you don't want them thinking, 'Oh my God, they're still *finding* this?'

But that scene with Gary involved a lot — he has to be drunk, yet cogent, and really specific about the points he's making, but there has to be a degree of subtlety as well as the broad brushstrokes. Also, everyone else at the table is doing silent-movie acting, while he's performing in this incredibly broad but appropriate style. It's a really difficult scene to task yourself with, because the audience may be thinking, 'Why are these people letting this guy talk like this to the richest man in the world?' And just because all the other actors at the table don't have lines, it doesn't mean they're not properly engaged with what's going on — you've got two dozen other guests who all have to look as if they're too afraid to enter the roundabout. So if Gary isn't moving and delivering his dialogue at a clip that's fast enough, then you do start to wonder why someone wouldn't interject and try to save him. The first six times we rehearsed that scene, I did get a bit worried; I was looking over at Erik like, 'Uh oh — maybe we didn't think this through enough.' We had to establish the right rhythm for the scene, so that the pauses wouldn't be long enough for anyone else to really jump in.

How do you strike the balance between realism and a more stylized approach on a



"A lot of the look of the bungalow scenes is due to the fact that we were lighting from outside the room."

Top: Mank and his caretakers kick back in the bungalow where he works on the *Kane* script. Middle: Orson Welles (Tom Burke) and John Houseman (Sam Troughton) pay Mank a visit. Bottom: Mank's wife, Sara (Tuppence Middleton), tends to her drunken husband at their home.







project like Mank?

Messerschmidt: First you have to evaluate the movie. On a project like this, there's an element of, 'Okay, how do we get that classic black-and-white look?' But I think you first have to ask, 'What are we making?' How do you make your decisions reflexive? Previsualization is great, but it's more about trying to have a clear idea in your head for the visual approach — and I'm not even saying that I did in the beginning! I had anxiety going into the movie. When David first called me about the project, my reaction was, 'Oh, cool, I get to do a black-and-white movie.' So I started to think about what a black-and-white movie looks like, and I had naively only considered film noir — because that's what cinematographers are naturally attracted to. I sent David some images to consider, and he said, 'Yes, there's some room for this.'

But as I started to go back and watch more black-and-white films, including some I hadn't seen for a long time, I immediately realized how narrow-minded my initial inclination was. I got very insecure, and I thought, 'I have to reevaluate this approach a little bit, and I'm going to have to think about things in terms of the story instead' — not in the context of how a black-and-white version of that story would be, but in terms of what was actually happening in the scenes. I pulled lots of references: *The Night of the Hunter, Rebecca, The Apartment, In Cold Blood*, et cetera. *The Grapes of Wrath* is a movie that takes place in a lot of environments like one of the main settings in *Mank*. I started pulling more references like that, because *Mank* is not a gumshoe noir thriller; it is much more varied in theme.



"We were consciously trying to avoid overt homage [to Citizen Kane]. What was most terrifying to me is that a movie like this can so easily become a parody."

A long dining table featured in a climactic sequence helped influence the filmmakers' decision to shoot *Mank* in the 2.21:1 aspect ratio.



I was worried that I was going to make the wrong choices because I had been seduced by the idea of what I initially thought [the look] should be. I kept asking myself, 'Is this right? It feels right, but is it stylized enough? Maybe I should go further.' The fact that it's a black-and-white movie amplifies that part of the job, but that part of the job is always there — we're always evaluating our own decisions and trying to figure out what a film is.

What led you to shoot the film in the 2.21:1 aspect ratio? Did you ever consider shooting in an era-appropriate format like 1:37:1 or 1.33?

Fincher: We talked about it...

Messerschmidt: ...but it wasn't a long conversation.

Fincher: When I started out shooting in 4:3, I just could never do it.

Messerschmidt: That ratio changes more than just composition; I think it changes your blocking choices. You can't really shoot overs. You can't do shots with perspective. I mean, you can, but it's not as effective.

Fincher: The ratio we used was decided in preproduction when I thought we were going to put Hearst at one end of the table and that he was going to send Mank to the other end of the table. And then we found out that even in death, William Randolph Hearst continued to flummox us, because he always sat in the *middle* of the table. But I was thinking initially that we would need 2.21:1 for this 54-foot table.

For the record, we shot 2.21:1 [to achieve the perspective of] 70mm, 5-perf spherical widescreen. For my money, it's an aspect ratio that's

wide enough to look good on a 1.78:1 HD monitor and tall enough not to look weird. To me, 2.40:1 on a 16:9 monitor feels like there's too much black on the top and bottom, and 1.78 looks almost like 4:3.

Mank is designed to look as if it was shot during the same era as *Citizen Kane*. Did you do any scholarly study of *Kane* to prepare?

Messerschmidt: We were consciously trying to avoid overt homage. What was most terrifying to me is that a movie like this can so easily become a parody. You want to lean on pastiche as opposed to parody, and riding that line is a scary proposition.

Fincher: We were dealing with completely different types of environments than Welles was working with. *Citizen Kane* has a lot of these mausoleum-like spaces — the Thatcher Memorial Library, and so on. We had to deal with [transforming modern-day] L.A. and doing scenes in the desert — places with buckling wood floors and stucco, or the Paramount backlot, which doesn't have a straight line in it! A lot of what we were shooting involved sunlight, or dust blowing in from the desert, or cars driving off with cows mooing in a field.

You shot with a custom-designed Red kit — an 8K Ranger camera with a black-and-white Helium sensor. Did you ever consider shooting with a color sensor and converting to black-and-white?

Messerschmidt: Initially I was thinking that we might find some advantages to having color in the negative — that it could possibly help us in the digital intermediate, and that we might miss the ability to key

certain colors and adjust their individual tone. We tested a color sensor, a regular Red Helium, against the monochrome Helium, and the monochrome was clearly the better option. This was long before the conversation about light sensitivity and the benefit of added speed for our deep-focus work. The monochrome sensor is much faster. We rated the camera at 3,200. It's really clean at 1,600, but we actually liked the look of the noise we got at 3,200 — we liked the texture of it. It was an easy choice.

One aesthetic strategy *Mank* shares with *Kane* was the use of higher T-stops to achieve deep focus.

Messerschmidt: In that regard, our approach wasn't so much about Citizen Kane as it was about how we saw black-and-white looking the best and making it relevant to what we were trying to do. Because we didn't have the luxury of color separation, using higher stops helped describe depth. We needed texture, we needed bite, and we needed to see the spaces; we couldn't have everything collapse into muddy, soft, ethereal backgrounds. That just wouldn't have worked as well, especially when you're trying to describe depth and use it as a compositional tool.

What made you choose Leitz Summilux-Clenses?

Messerschmidt: I did a lot of tests, and one of the tests we were looking at was resolution and sharpness at deep stops. It gets quite difficult to judge actualized depth of field at those higher stops. What was quite easy to judge was lens resolution at those stops. Lenses really start to fall apart across the board at T11 due to refraction, so 11 started to feel like the ideal stop — we knew that we could be there and get the depth we wanted without sacrificing too much resolution. A lot of how we solve that is through filtration tools, of course.

But it started by just projecting the lenses. The Summilux-Cs, the [Arri/Zeiss] Master Primes and the [Panavision] Primo 70s all produce 200-plus line pairs of resolution at T2.8. But if you go to T16, they're all sub-70 line pairs of resolution. So it's a pretty drastic shift.

Fincher: There's no point in shooting at T11 on a 40mm [full-frame] sensor, because you're kind of working against yourself. So we knew we would be using a 30mm [Super 35] sensor, and what the stops would be. Then it was just trial and error, but we kept coming back to Summilux-Cs because they're sort of a perfect collection device; they don't have a lot of anomalies and they're flat.

Messerschmidt: The other thing that was a surprise to me is that the Summilux-C's iris is physically smaller, in terms of diameter at a stop of T11, than a Master Prime or a Primo 70. So your apparent depth of field is greater, because your actual *f*-stop for a given T-stop is smaller. In actual, objective experience, a T8 on the Summilux-Cs has the same apparent depth of field as a T11 or T11.5 on a Primo 70. So it was kind of an empirical choice, more than anything.

In terms of lighting, can you describe the overarching idea behind the use of practicals in the frame? Throughout the movie, you have these wonderful atomic-hot practicals scattered around in the backgrounds, even in daylight scenes — like the scene where Marion and Mank reunite on a movie location with the big brute arcs behind them.

Mank confronts a glowering William Randolph Hearst (Charles Dance, middle photo) as Marion and other discomfited dinner-party guests endure his boozy harangue.







Messerschmidt: The movie is grounded in realism, and I just think it always looks better that way — if you start with that and try to get the look as close as possible to how things might look or be lit in those situations. I think if [Citizen Kane cinematographer] Gregg Toland [ASC] had had the technology to light with practicals and keep scenes exposed, he would have done it as well.

There is not a lot of off-camera lighting in Mank. I thought it would

Tech Specs:

2.21:1

Camera: Red Ranger with 8K Helium monochrome Super 35 sensor Lenses: Leitz Summilux-C

A dejected Mank tracks the results of the 1934 California qubernatorial contest.



be cool if the bungalow scenes were more modern in terms of technique than the flashback sequences, which have a bit more classic style in them, in terms of how they're lit and how the contrast in those shots is rendered. A lot of the look in the bungalow scenes is due to the fact that we were lighting from outside the room, and we were using practicals at night. There's a lot of toplight in those scenes, and it's not as sculpted as classic, period black-and-white.

Putting practicals in the frame may just come down to taste — it just seemed to make sense.

In a movie where many modern methods were used to create a vintage look, the day-for-night walk-and-talk between Mank and Marion at San Simeon stands out as a more classical technique.

Messerschmidt: That was fun. There were some things I was worried about. For example, we put the brightest bulbs we possibly could find in our practicals — I think they were 800-watt metal halides. They had atrocious color, but that didn't matter for our purposes; we were just hoping to strike the right balance. I remember not sleeping the night before we shot that scene because I was so worried it would be cloudy when we got to the location. We built some LUTs in advance, and shot some tests with the actors. But we were putting so much frontlight on Gary and Amanda, just to get some exposure, that Gary pulled me aside during the test and said, 'This is a challenge. I'm not sure I can do this with so much light shining in my face.' We had some special contact lenses made for them so they wouldn't look like chipmunks from squinting.

When you shoot scenes like that, you always wonder if people will notice. Most people do notice, so it feels good when someone seems surprised and says, 'Wait — you shot that day-for-night?' I'm glad we did it that way, because if we had just lit it while shooting at night, the sequence wouldn't truly convey the full scope of the Hearst estate, and the audience wouldn't appreciate how *big* the space was.

How did using HDR impact the production?

Messerschmidt: There's monitoring in HDR and finishing in HDR, and those are different conversations. After working in HDR several times now, I've come to the conclusion that monitoring in SDR and

finishing in HDR is a little bit like shooting film, but exposing it based on the video tap. I can look at a waveform monitor, I can look at false color, or I can look at a histogram and figure out where the optimal exposure is in terms of protecting it, but I cannot judge contrast ratios in SDR if I'm finishing in HDR. I can only judge contrast on HDR monitors.

From a more creative, philosophical standpoint, it meant that we could really exploit the sensor and the camera. We could push the contrast more when we wanted to, we could embrace the highlights, and we could block for it. When we were shooting day-for-night, we could look at that day-for-night look and see how bright those practicals could actually be, or how far we could get away with the backlight on Gary's head so that the audience would actually buy it. In the end, the film looks very close to what it looked like on set, which is comforting.

David, what do you see as the primary advantage of digital filmmaking?

Fincher: Well, there's the science of it and there's the taste of it, but my entire existence has been about taking the voodoo out of [the creative process]. The nerds get on these rants about which sensor or which piece of glass is best, or 'What's the optimal ND filtration?' All of that stuff is interesting and good, but digital acquisition for me is about having a 27-inch or 32-inch monitor where everyone can see what we're making. We can see the frame lines, or how the makeup looks. We're finally on the same page.

How do you evaluate a cinematographer's contributions to a given project, Erik?

Messerschmidt: I think cinematographers are often over-credited for the way a movie looks, and under-credited for the way the story is told — conversely, production and costume designers are often under-credited for their work. I think cinematography has a lot in common with editing. We take physical action into a three-dimensional space and figure out how to transform it into two dimensions the audience can understand. That part of the process is so interesting to me — particularly on a movie like this, where the filmmaking is very structured. We're not just shooting on long lenses and handing what we get to the editor; we have specific intentions for the sequences and how they might be cut together. We have lots of takes, and the editor, Kirk Baxter, gets to take all of that material and distill it down into something remarkable.

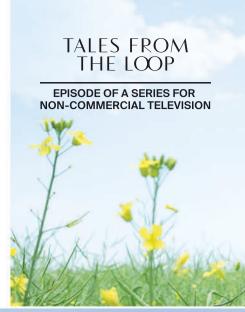
What I enjoy most happens in those conversations we have after the table read, or after blocking rehearsal, in terms of how we're going to break a scene apart, or where the sun's going to be, or how we're going to use focus to tell the story, or when we're going to pan the camera deliberately to reveal somebody in the room to say a line. Some of those conversations may have nothing to do with the look of the film, but they have everything to do with how the audience experiences the film. I think all of those things are under-discussed in terms of what cinematography really is. \mathbf{O}

David E. Williams also contributed to this interview. To read an extended version, visit ascmag.com/articles/mank

MANK Shot on Leitz SUMMLUX-C



CONSIDER AMAZON ORIGINALS



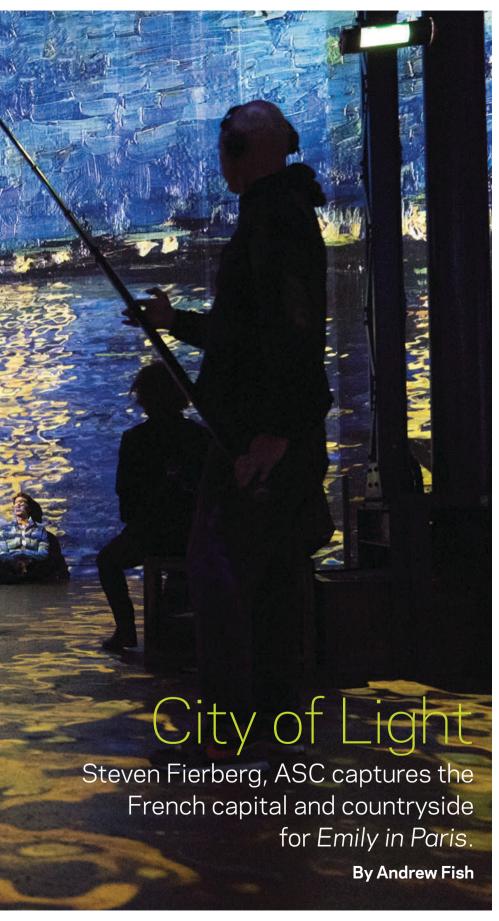


AMAZON STUDIOS









aris is beautiful — it's hard to miss that," says Steven Fierberg, ASC, when asked what's most striking about shooting in the French capital. "One of the things that really helps you as a filmmaker is that the city was designed in a unified way in color and in shape which

was designed in a unified way, in color and in shape, which makes it easier to create an image that has unity."

As part of this month's international focus, we reached out to the Detroit-born, New York City adoptee and current L.A. denizen to discuss his French foray on the Netflix series *Emily in Paris*, and the unique aspects of shooting in and around the City of Light.

"It's a city that's obsessed with beauty," continues Fierberg, whose experience in photographing Paris also includes his camerawork on Showtime's *The Affair*. "It always has been, and therefore so much effort has been put into the city to make it beautiful. It's hard for me to think of an American city where that concern was so primary."

Created by Darren Star and aptly compared to one of his prior creations, *Sex and the City, Emily in Paris* follows the lighter-than-air exploits of young urban professional Emily (Lily Collins), who uproots from Chicago to educate her employer's new acquisition — an upscale Parisian marketing firm — in the ways of American social-media merchandizing. This goes over as poorly as one might predict, thus revealing Emily's true mission to unshackle herself from her own hang-ups and leap into just the right kind of hijinks that end up assisting and elevating (almost) all involved.

"I've wanted to do a show about an expatriate living in Paris for quite some time," Star says. "I thought it would be great to ... create a show that would explore the overall experience of what it's like to be an American abroad. Traveling and immersing yourself in a foreign culture renews you in a sense, and it opens your eyes to the world."

Says lead actor Collins, "Collectively we were all having fish-out-of-water experiences. We all had real-life anecdotes about living in Paris as Americans."

In regard to his own experiences, Fierberg notes, "I start out speaking French when I begin working with a French crew, and that makes a good impression. It's very important for the relationship to make that effort. What happens, though, is I'll speak in French and they'll reply in superior English. Ultimately, on *Emily in Paris* I was encouraged to speak in English. That was helpful, but I've also realized that the English we use on-set has a lot of slang, which can be hard for them to interpret. For instance, when I asked them to 'take the light down,' they thought I meant they should

Camera and Lenses

"It was important that the camera would have a full range of color and that the image was flattering. I wanted to use Arri Alexas, and because Netflix required 4K, we used Alexa LFs.

"This is a show where people look their

best, and even for the clothing it helps to have the lens fairly sharp. The Arri Signature Prime is that sweet spot — it's pretty sharp and clean, and can handle flare with no problem, but it's not harsh. The image has a kind of roundness to it. It's almost a perfectly neutral lens. We added a quarter

Glimmerglass for a touch of glamour. This is in contrast to lenses like the Panavision Variels that I'm using on *In Treatment*, which have a lot of character built in. With a digital sensor, a huge part of creating the look is lens selection. How lucky are we to have so many great choices!" — Steven Fierberg







Parisian Gear

"The lights and cameras they use in France are basically the same as we use here, but there were a few pieces of grip gear that are just a little more elegant than our solutions.

"One example is that for most wall spreaders in the U.S., the more weight you put on the piece of wood that spans the length of the ceiling, the more stress it puts on the connections to the wall. What we used in Paris was an aluminum spreader that curves up in the center of the room, then curves back down when it meets the wall — so the more weight you put on that, the *more* it holds to the wall instead of less. It's using the principle of the arch, which is a very strong structure.

"They also use 1-meter-by-2-meter [3.3-foot-by-6.6-foot] diffusion frames — rather than our square 4-foot-by-4-foot frames — which is more functional and something we should do here. Two-to-1 is a good ratio for beautiful light. We've tended to use squares because they cover the round light, but in terms of the *area* that the light is supposed to illuminate, the ability to use that rectangular frame — horizontal or vertical — makes it more useful than a square, when it fits within the set or location." — S.F.

Top: Steven Fierberg, ASC (left) and director Andrew Fleming. Bottom: Fierberg "painted with light" to create a nightclub from a sparse set.

bring the light physically lower." He adds with a laugh, "And there was something I would say on-set that drove the electric crew insane — when I said 'less light,' they would think I said 'plus light' and they would give me 'more.' You have to learn what words and phrases *they* prefer, and that comes from practice and experience.

"It's also time for me to finally accept that four years of Detroit highschool French is not enough," he adds. "I've enrolled in contemporary French classes. It will be my third time shooting in France when I return for Season 2, and I owe it to the crew to be fluent in the language of the country where I'll be living and working."

The internet was abuzz when *Emily in Paris* dropped last October, with widespread praise for the show's look. Fierberg — whose work includes HBO's hit series *Entourage* and the provocative feature *Secretary* — had worked with Star in the early 2000s on the pilot for the comedy *Miss Match*, and knew that the showrunner would want a "contemporary and clean" look for their latest collaboration. "A lens that introduced a lot of flaws would not have the contemporary energy that Darren knew was right for the show. It needed to feel 'right now' — I knew that was the look he wanted and I was thrilled to give it to him."

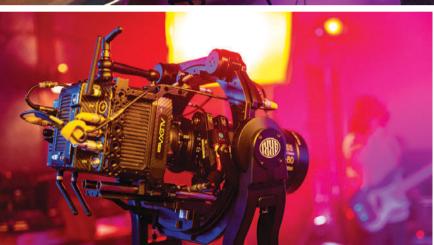
Fierberg sees the show less as a commentary on French society and more as a look at some elements of American culture "that Emily represents, which may seem crude or superficial to the French and disconnected from nature and sensuality — [concepts that are key to the] French vision of humanity. What happens constantly on the show is that Emily is confronted with something she thinks she shouldn't do, or people shouldn't do — so she's a character with fixed ideas and you're trying to open up her world by exposing her to things she's never experienced.

"To that effect," he continues, "a candlelit dinner at a château in the Loire Valley, where Emily finds herself in Episode 8, is certainly a world that is as different from urban Chicago as we could make it. [See sidebar, page 64.] It was director and executive producer Andy Fleming's idea to have the dinner by candlelight, just as it would have happened hundreds of years ago. Andy is a director with a great visual sense."

When the cinematographer first arrived at Le Château de Sonnay in the vineyards southwest of Paris, he was intrigued by the Neoclassical paintings on the walls that "looked like Jacques-Louis David portraits you would see in a museum," he says.

When Fierberg inquired about the paintings, a young woman who lived there "pointed to a couple of them and said, 'Those are my great-great-great grandparents.' It really brought home for me that this family has been living in that house for centuries. All this real-life history lent itself amazingly well to the idea of Emily's journey into a romantic past, where you feel connected to nature, and where things haven't really changed in generations."







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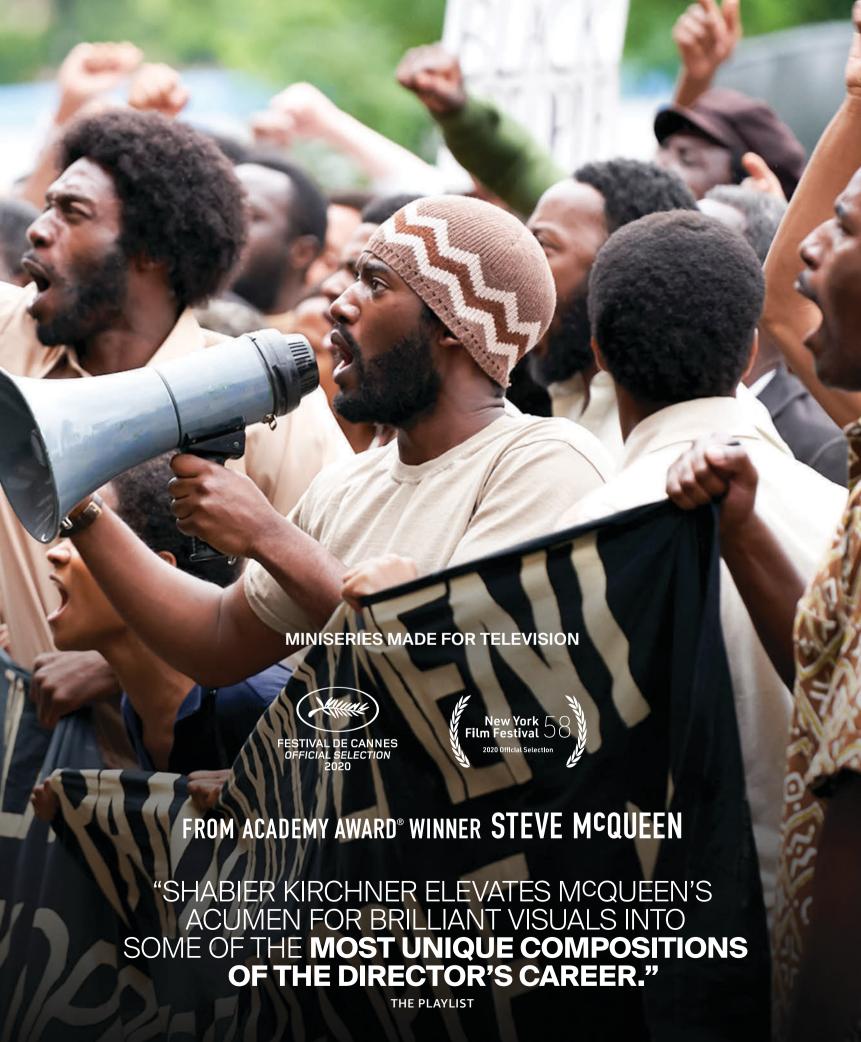












"When you're given a great location in the countryside, your task is simply to not screw it up."







It's also amid this picturesque countryside that Emily informs Gabriel (Lucas Bravo) — her secret crush who's dating her friend — that they'll certainly *not* be taking a romantic afternoon bike ride together, and she wheels off on her own — with some captivating images captured by "a terrific camera crew," Fierberg says. "A-cam operator Patrick de Ranter and 1st AC Michel Galtier were on a dolly track, and B-cam operator Guillaume Quilichini and 1st AC Camille Garbarini were on Steadicam."

The cinematographer notes that for day exteriors, "I'd rather shape natural light than add movie lights. I typically use a white bounce on one side and something black as a negative on the other side, to give it contrast. Often the black material is angled a little bit over the top of the actors, so it cuts down on toplight. You also need to talk to the director beforehand, during the scout, and decide which way you're going to be looking for most of the scene, and then look at where the sun's going to be during that time of the day. The sun is a really big, really bright light to be in the wrong place — it can be a very powerful adversary, so it's important to make it your friend."

Shooting on the countryside, Fierberg says, is a good example of his preference for "feeling what a location is giving me, and then adjusting and working with it." His philosophies about location work were put to the test, however, when he was faced with one of the worst locations he'd ever seen. Tasked with framing a scene at a Paris nightclub — where Emily's friend Mindy (Ashley Park) parties with her pals from China — the cinematographer was given an actual club's dark, empty basement that doubled as a makeshift screening room. "It was the best we could find given our schedule and where we had to shoot later that day," Fierberg says. "When you're given a great location in the countryside, your task is simply to not screw it up — but when you have a bad set, you have to create from scratch. So we painted it with light!

"We used PAR 36 spotlights and added smoke," the cinematographer continues, "and then with the help of Anne Seibel, our amazing production designer, we added a bar behind them that we lit pretty bright to give it depth. We needed contrast in that background, with both really bright and really dark elements, in order to make the scene come alive. With our talented gaffer and key grip — Stéphane Bourgoin and Pascal Delaunay, respectively — and a great crew, I think we made that little dark pit of a room into one of the best-looking scenes of the season."

Fierberg also notes his appreciation for the work that fellow Society member Alexander Gruszynski contributed for the show's final two episodes. "It's very exciting to see another DP emulate your look, because they're never going to do it exactly the same as you, and seeing the little differences he added was thrilling."

Fierberg speaks fondly of the "French hours" that he and the crew worked to bring the show's vivid look to life. A typical day, he says, might start at around 8 a.m., and break for a one-hour lunch three or four hours later, "and the lunch is enormous. There's butter and baguettes everywhere and 10 different desserts, and somehow everyone stays fit and healthy. Then you shoot for another six hours or so, and because it's



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"The lenses I chose for *Supernova* were based on the look that Director Harry Macqueen wanted for his film, which was somewhat old fashioned, warm and romantic in feel, offering a close and intimate chemistry between the two main characters. I arranged a screening for him of Edward Norton's *Motherless Brooklyn*, on which I had previously used Cooke Panchro/i Classic Primes, and Harry loved them on that film. Subsequent testing for *Supernova* featuring the principal actors confirmed our thoughts. Harry described them as having a rounded and natural feel which reels in the viewer.

Over the three films I've shot with both the original and updated versions. I have become very attached to the antique look of the Panchros, partly because they're not clean, modern looking or super sharp, but really rather 'painterly' and cinematic. Like the originals they feature the eccentricities of the original Speed Panchro designs, and when used wide open, can if required, offer focus fall-off at the edges of frame along with a gentle fall off in the corners in fact, all the attributes Harry and I really wanted for Supernova."

Dick Pope, BSC Cinematographer Supernova







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Bottom: Fierberg and his wife, Shielu, with the camera crew.









Dinner by Candlelight

The dinner scene at Le Château de Sonnay, which was lit essentially by candlelight alone, required keen attention to a changing environment.

"The first thing we looked

at was how fast we could set the camera's ISO, and what the image would start to look like," Fierberg says. "The camera may 'want' to be at 800, where it's 'supposed' to be, but if you set it to 1,200, what does that look like? Or 1,600. I believe we ended up shooting at 1,200."

He adds that he appreciates the option on a digital camera to "set the shutter to 270 degrees. That gets you even more light.

And we were using Signature Prime lenses that were not going to flare too much, and could handle bright candles." Flaring was further controlled by Tiffen Glimmerglass filters, from strong to light — more flare to less — depending on how much they wanted.

"And whatever f-stop we started shooting at, we had to keep opening it up because the room kept getting darker as it filled with smoke from the candles — and every once in a while, we had to air it out. When you're working with a digital system and you have a DIT — Adrien Blachère on our show — and a waveform monitor, you [always] know when to open up. We usually started out at 2.81/2, but by the third take we might be wide-open at 1.8, so thank God our great assistants could keep it in focus.

"When shooting candlelight," Fierberg says, "it's about playing with the candles. You're dancing with them. You're seeing what they're doing and adjusting as needed." — Andrew Fish

such a short day, there's time after you wrap to go out for drinks — and I swear to God, one evening by the side of the Seine they were all singing 'La Vie en Rose' together! Consulting costume designer Patricia Field and I were the only Americans on the crew other than the directors and writers, and we were blown away. It reminded me of when I was shooting *The Affair* in Paris a few years ago, when we would finish shooting and then go to a café, and we'd have some wine and drink and be happy. The French have a saying that's ingrained in their culture — 'liberté, égalité, fraternité' — and I like to think of this as the fraternité.

"People work equally hard in France and the U.S., and the crews are good and fast in both countries," Fierberg adds. "The American crews that I'm a part of are fantastic, and among them are some of my closest friends, though I do sometimes think about a line from *Emily in Paris*: 'Americans live to work and the French work to live.' It's not like France is perfect, but there are some cultural differences that I think the United States could use a little bit of. In the end, I'm thrilled to work in either country — *vive la différence*!" Φ

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Touring the Planet By Peter Tonguette

hen Ben Joiner, ASC was hired to photograph the BBC series automotive Top Gear in 2002, the show was shot largely in the United Kingdom and was not yet an international phenomenon. But as the series grew in popularity, becoming one of the BBC's most watched shows, the producers began venturing to parts unknown. "Very quickly, I think they had ambitions and realized that [the show] could go wherever there were cars and roads," he says.

Top Gear hosts Jeremy Clarkson, Richard Hammond and James May ultimately departed from the BBC series and moved to Amazon Prime Video to develop The Grand Tour, which premiered in 2016. Joiner, who received a BAFTA Craft Award nomination for his photography on Top Gear and had served as a cinematographer on the series since its inception, jumped at the chance to photograph The Grand Tour, which continues to take him to countless countries, including Colombia, Croatia, South Africa, Vietnam and more.

spot as they present the show's signature blend of car reviews, challenges and assorted gags. "I respect the fact that as a production, they often choose unlikely destinations away from the well-trodden paths of TV travelogues," the cinematographer says.

Joiner — who supervises a regular pool of talented camera operators whose long-term work on the show helps to maintain visual consistency across continents — approaches each episode with a kind of dual mission in mind: He and his team must capture the nuts and bolts of the show, but he also wants to explore and show off each place and its people — not just as a decorative backdrop, but as key visual elements. "It's almost become this sort of side agenda," he says. "In many ways, it will just be a shot of an adapted Bentley, with Jeremy Clarkson driving through a jungle road in Madagascar, but in the back of my mind, I'm trying to tell that story in a wide shot, or using a certain lens to compress the shot, so that there's life outside of just a car show in the frame."

The cinematographer often surveys the scene with a single question in mind. "What would my parents, who haven't traveled widely, want to see?" he says. "I want to try and capture the shots that enable them to 'travel.'

"Sometimes it's as simple as panning from Each episode deposits the hosts in a different the surrounding location back onto the hero

cars," he adds. "We're always trying to relate the environment back to the story of the guys' journey through it. Over the course of a 90-minute film, the audience comes away not only with all the gags and jokes from the presenters, but also, I hope, a strong sense of place."

A primary motif on The Grand Tour, the cinematographer says, is epic scale. "We want the drone shots to look huge, we want epic sunsets and vistas, and we put a lot of effort into going up mountains and across rivers to try to capture the scale and majesty of countries like Azerbaijan or Mongolia. I think that's where our true documentary sensibilities come to the fore, because we're always looking over our shoulders in the opposite direction of the presenters or the convoy to see if some light or weather is developing that we might be able to film and draw into the context of the journey."

Remarking on the importance of the local people to the narrative of each episode, he notes, "From the endlessly cheerful women in Vietnam [who were] floating shopkeepers in the 'Seamen' episode, to the slightly desperate and tired-looking faces we encountered in Mozambique in 'Feed the World,' faces tell subtle stories, and the personality of a country is often etched into those faces."

For example, during a recent episode, "A & Massive Hunt," shot in 2019 in Madagascar and

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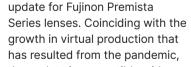


Finland

Safe shooting practices brought many productions to Finland in 2020. The sci-fi thriller *Dual*, directed by Riley Stearns and photographed by Michael Ragen, is the first major American production to shoot entirely in Finland. Shot in Finland and Estonia, the hostage thriller *Omerta 6/12* was photographed by Camerimage Silver Frog 2020 winner Rauno Ronkainen.

China

Luo Pan, ASC, CNSC shoots The Battle at Lake Changjin. Directed by Chen Kaige, the feature follows two brothers through the Battle of Chosin Reservoir in North Korea in the 1950s. Principal photography is located in South China for the characters' homeland, and North China for the battle scenes. Dandong, a city in northeastern China that borders Sinuiju, North Korea, across the Yalu River, was chosen to simulate the real location where the battle occurred.



Japan — Gear Spotlight

Japan-based Fujifilm released a
Zeiss Extended Data firmware

the update is compatible with Unity and Unreal gaming engines.

Australia — Gear Spotlight

Australia-based company Atomos launched Neon HDR monitor/recorders, available in 17" and 24" models.



"There's so much experience to have, and so much wonder as well, beyond the two or three miles around where you spend your domestic life."

Joiner at work in Mozambique.



released last December, Joiner says, "The people were endlessly curious about us, particularly James' car, which for some reason they just found hysterically funny. So we tried to capture kids laughing at this cartoon of mud and orange as the convoy rumbled by. Moments like this are magical as it feels like you are communicating with people who you will probably never see again. You share a passing moment of humor, a joyful wave, or maybe even sorrow and empathy. It's a privilege and a responsibility to at least attempt to represent these encounters with authenticity and grace."

The particular circumstances of the production are often folded into the show. During a shot in Namibia, co-host Hammond's car broke down at the back of a convoy, and camera operator Steve Lidgerwood was left behind along with other members of the crew. "Suddenly, these women came out of the wild and

started dancing around Richard," Joiner recalls. "It's a really funny and beautifully spontaneous scene. [The producers] always said, 'We'll just go somewhere and stuff will happen — calamities and beauty."

For Joiner, *Top Gear* and *The Grand Tour* not just assignments, but opportunities to enrich his understanding of the world. "There's so much to learn and be present to in the countries that you visit," he says. "There's so much experience to have, and so much wonder as well, beyond the two or three miles around where you spend your domestic life."

The cinematographer does some research on each destination before embarking on a shoot. He asks about the conditions he and his team will face — the average temperature, weather to expect, or altitude — and he will ask about crew safety and political stability in the region. The camera equipment is kept simple — three

main Arri Amira and Alexa Mini cameras, plus a spare — and, as much as possible, the gear is kept interchangeable. "If somebody's wide-angle lens gets damaged, for example, we'll have another one on the other unit that we can share amongst the units," Joiner says. The team carries a diverse array of lenses, including Canon zooms (CN7x17 17-120mm T2.9, CN10x25 25-250mm T2.95-3.95 and CN20x50 50-1,000mm T5-9.8) and Tokina Cinema lenses (100mm T2.9 macro and ATX 11-16mm T3), as well as a TLS Morpheus 80-200 T2.8 zoom.

The show's production itinerary often takes Joiner and his crew on detours unlikely to be traversed by the average tourist. For example, on the Madagascar episode, the crew traveled to its destination on a dirt road that wasn't quite a road — it was more akin, Joiner says, to a wide path beaten into a jungle.

"We were on the west coast," he says. "If we'd been on the east coast, you would have seen the baobab trees and the lemurs and maybe some incredible wildlife. Our journey wasn't that way at all. For crew and presenters, it was a journey of attrition — long bruising days in the [back] of a Land Cruiser being thrown around by the rocks and ruts. There are days when you think we will never make it through there, or we will never get that vehicle unstuck."

Yet the off-road journey, Joiner now feels, was a more authentic way to experience the actual place, allowing him to gain a deeper appreciation of the island nation away from tourist traps. "What you actually get is a visceral sense of being and existing in that country for 17 days," he says.

While on a location, Joiner allows himself to soak in his surroundings. During the shooting of an episode of *Top Gear* at the magnetic north pole, the cinematographer was struck by the Arctic sky, the most piercing blue he had ever encountered. "The sun had sun dogs around it — these kind of points of light at 90 degrees and 180 degrees around the sun where the light is refracting through ice crystals in the upper atmosphere," he says. The cinematographer gives himself permission to shoot things like this, which might be considered extraneous by some. He knows that such material will be



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handled ruthlessly in the edit — "It'll be maybe 36 frames, or a little two-second blip," he says — but such shots are the building blocks that make *The Grand Tour* into a series that is as

much about global locations as it is about cars.

Such interludes help give each episode a unique flavor, says Joiner, who points to small moments that he and his crew have captured, such as an impromptu cricket game between the crew and a group of local young men they encountered while shooting an episode in India. "In the final film, it's in there — it's 30 seconds, maybe — but it was this spontaneous moment that came out of nowhere, and as filmmakers, you have to be open to that."

A spirit of openness increasingly informs Joiner on his journeys. In recent years, the cinematographer has often paid repeat visits to a particular location. For example, he has made four trips to Vietnam, most recently to shoot an episode of The Grand Tour. "It's very tempting to fall back into [the mindset of] 'this is how we shot it last time," he says, but after becoming familiar with Vietnam, he knew some things to look out for. "On the Mekong River, we filmed boats and cargo as a metaphor for the lifeblood of the river and its arterial presence in southeast Asia," he says. "If you brief the operators and everyone gets on message with what to look out for and what to shoot as it passes by, you can express a view and create a texture." He also emphasizes the importance of their seeing Vietnam, and the world, with fresh, open eyes — something that seems likely when the fourth season of *The Grand Tour* eventually resumes production.

"Something I've learned to appreciate on all of these journeys is that the reason you are there is to make a program for TV," Joiner says. "But in making that, you sometimes have very profound life experiences that can't be captured or don't make the edit. Those moments Sweet Tooth director Jim Mickle shoots in New Zealand.

are as important to me as an individual and human being as the shots that do make the finished film. They are shots for the movie that you carry within you."

New Zealand Under Southern Skies By Adrienne Kohler

The vast and lush landscape of New Zealand has doubled as feudal Japan (*The Last Samurai*), portrayed the sweeping grandeur of Middle Earth (*The Lord of the Rings* trilogy), and provided a home for bickering vampires (*What We Do in the Shadows*). But perhaps the Kiwis' greatest achievement in 2020 was containing Covid-19. By acting quickly and decisively when the pandemic started, the New Zealand government largely shut the virus out of the country, allowing motion-picture productions to go ahead.

Currently, several hundred international productions are shooting in New Zealand, including James Cameron's *Avatar* movies with Walt Disney Studios; Netflix's live-action series *Cowboy Bebop* and *Sweet Tooth*; Amazon Studios' *The Lord of the Rings* television series; and Paramount's *Power Rangers*. The Jane Campion-directed feature *The Power of the Dog* has wrapped and is in post. The *Avatar* franchise and the *Lord of the Rings* series are expected to continue shooting throughout 2021.

In March 2020, the government adopted a Covid-elimination strategy and implemented a strict five-week lockdown, with only citizens and permanent residents allowed to fly into the country. Since the lockdown has been lifted, apart from a small outbreak in July, Covid has largely been kept out of New Zealand, allowing life to mostly return to normal. In June, a visa category for critical workers was introduced, allowing overseas productions to enter once they go through quarantine and satisfy the country's Covid-testing protocols. Since then, six productions have entered New Zealand to shoot, with two more in prep, says Philippa Mossman, head of international screen attraction at the New Zealand Film Commission.

When the country implemented the March lockdown, principal photography on four

Avatar sequels was taking place, and producer Jon Landau and his team were preparing to return for the next block of shooting. They waited for the lockdown to be lifted, then chartered a flight to bring cast and crew to Wellington, which Landau says was the safest way to get there. "The health and safety of our crew was of paramount importance to us, so we did it that way," he says. "Before leaving, we asked everyone to self-isolate for eight days, then we did the managed isolation here for two weeks. It was very well-run."

They were all happy to be working when so many of their colleagues could not, and to be in a country that took the pandemic seriously, Landau says. "We are taking precautions, of course, but we can have more people on set than you currently can in L.A., we can have closer interactions, and we don't need everybody wearing masks or face shields everywhere."

According to Landau, *Avatar*'s international crew of 31 people helped generate employment for 400 local crewmembers and roughly 800 people employed by visual-effects company Weta Digital. Being able to have international productions enter the country has brought substantial economic benefits to the New Zealand economy, says Mossman, and given much-needed support to both the international and local film industries in a very difficult year.

Sweet Tooth's director Jim Mickle helmed the fantasy drama's pilot in New Zealand in 2019, and after the series was picked up by Netflix, they managed to get a flight back to the country in early July after qualifying for critical worker visas to shoot the rest of the series. "We had been in lockdown in L.A. since March, and all of a sudden we were outside, and they said we could take our masks off. There were so many things we hadn't done for months. It was a crazy experience, but great!"

Mickle says working in New Zealand reminds him of his early filmmaking days. "I love the film infrastructure here. I started out doing independent films, where everyone chipped in. I really love that style of filmmaking. It's very compartmentalised on-set in the U.S., and it's more socialized here."

New Zealand's containment of Covid, it

Cao Yu, ASC, CNSC (behind camera) on

to courteey of Cao Yu. ASC. CNSC.

"We sought to express the relationship between people and their environment."

the set of The Eight Hundred.

turns out, offers filmmakers more than just a place to work.

China

Mirror for the Heart By Alfonso Morgan-Terrero

A cinematographer's strength is evidenced through their ability to grasp the unknown and create poetry, says Cao Yu, ASC, CNSC. Early in his career, while shooting director Lu Chuan's *Kekexili: Mountain Patrol* in Hoh Xil, Tibet, Cao had to pivot to something he calls "a huge change." After coming up with a complex plan for shooting, he ultimately had to discard it because of a vicious climate and the sheer impracticality of shipping cranes and large equipment into a remote region. "At over 14,000 feet in altitude, you can barely breathe, so we could really only go about shooting in the simplest

way possible," says Cao. "We used a zoom lens and would just move with the camera on the tripod, shooting in the different locations until the film's completion." Yet such a simple approach yielded truthful, emotive imagery that reflected that region's way of life. "You have to go to the location and learn from its geography, the climate, the different ethnic cultures — you have to get a feel for all of that."

Cao is from Beijing, but his work has taken him throughout the vast geographical and cultural landscape of China. Self-reflection has compelled him to deepen his understanding of his artistic approach. "Shooting in these different places is a kind of mirror for the heart — it gives you a clearer sense of who you are," he says, as well as a keen sense of how to visualize life cinematically. When shooting "The Guiding Star" segment of the anthology film *My People*,





"We are open to global culture and are not closed in. We have a lot of up-and-coming filmmakers we are very proud to have in the AMC."

AMC President Carlos R. Diazmuñoz with director Jennifer Sharp while shooting Una Great Movie.



My Country, Cao shot in Xinjiang province, where he and director Chen Kaige sought "to express the relationship between people and the environment," Cao says. "We used a lot of wide-angle lenses to show the state of these two young men in this vast, desolate land."

Having shot some of China's highest-grossing films to date, Cao has created a visual language that has helped define how mass audiences consume cinema in the country. "I think it's great that more and more people in the nation are seeing the films and feel moved by them," he says. "I hope it means that we're sharing a sensibility — a mutual affinity for this kind of visual experience."

The cinematographer's latest feature, the historical war drama The Eight Hundred, which details the defense of Sihang Warehouse, part of the Battle of Shanghai, presents a crystalized version of this method. The equally intimate and expansive war epic — directed by Guan Hu and shot in Shanghai on Arri's Alexa 65 with custom-tuned Prime 65 lenses - was envisioned as "a cinematic poem," Cao says. Some scenes were lit in the dark Sihang Warehouse. where most of the plot unfolds, in an attempt to "capture light in the darkest night." In many cases, Cao operated the camera himself — a method that perhaps allows him to be closer emotionally to the world he is capturing.

Characterized by sharp and dense textures,

a hyper-immersive approach to composition, meticulously designed color schemes, and a stylized blend of natural and artificial lighting, the visual style of the production gives the viewer a heightened, inherently cinematic sense of reality. "To me, films are all like different kinds of dreams," Cao says. "As a cinematographer, the images you create should be striking, but a sense of reality must still exist. If the viewer thinks that a single scene is not real, then they will think the entire film is false. But when the whole film has a certain sense of reality, then the viewer can feel like they are in a dream.

"Even though we're a country with strong film censorship, the fact that a film can still resonate so strongly with the Chinese audience is inspiring; it's difficult to accomplish," the cinematographer says. As the country continues to grow at a rapid pace and announces its presence on the world stage, Cao feels that the visual language should also become more global. "China looks to integrate into the world as a whole — it doesn't intend to just exist as this separate entity in the East. I think my visual style represents this way of thinking as well."

Mexico

Global Outlook

By Tara Jenkins

Carlos R. Diazmuñoz, president of the Mexican Society of Cinematographers (AMC), feels confident about the direction of the Mexican film industry heading into 2021. "One thing about the culture in Mexico is that we are definitely go-getters. We're very optimistic, so production is slowly picking up," he says, including commercial and television work such as the Netflix series Selena, which completed production in Tijuana in late 2020 after being shut down earlier in the year due to Covid-19.

While the industry is making strides to return to normal, Diazmuñoz notes that this is also a time of change for the Mexican motion-picture industry. "The Mexican tax incentives for filming are going through some alterations," he explains. "There is talk of fusing the current incentives that are available. One positive aspect of the pandemic is that there are a lot of non-union groups uniting through the Mexican movement [during] this crisis to look out for their labor rights.

"Most importantly," he adds, "Mexican viewers are supporting the Mexican cinema. Our outlook on cinema is different; it's global. Our culture is very rich, and we are almost native artists thanks to our upbringing. As children, many of us took field trips that exposed us to world-renowned artists and our country's vast pre-Hispanic culture. Mexico is a country enhanced by and full of influences from other countries, not only through colonization, but through the many foreigners who decide on their own to live here. It's a country full of color not only through our arts and crafts, but also our culinary variations, which have been influenced by our amazing pre-Hispanic background and also European styles of cuisine."

This global outlook, he says, is also prominent within the AMC. "Our cinematographers are recognized worldwide, and that is not only thanks to the established big names. We have women [AMC members] who are extraordinary and reside all over the world. We are open to global culture and are not closed in. We have a lot of up-and-coming filmmakers we are very proud to have in the AMC."

He adds that it's not just prominent Mexican cinematographers who have "captivated the world with Hollywood blockbusters" — Diazmuñoz also mentions the rise of directors such as Alfonso Cuarón, Guillermo del Toro, Michel Franco, Alejandro G. Iñarritu and Carlos Reygadas. "Since the previous golden era of filmmaking — and now, with the new era of $\frac{Q}{2}$ films and television series — we are believing more and more in our capabilities as filmmakers, and the general public also believes in us more than ever. This kind of cultural recognition provides deep motivation that tells us anything is possible when you are determined to share unique stories — whether those stories are filled with family values, mishap or mysticism. Our culture has always been family-oriented and extremely close, so seeing Mexican artists and filmmakers recognized throughout the world can also nurture a culture of future filmmakers — and demonstrate the support



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our entire Mexican 'family' can provide so those dreams can truly be achieved and not seem far-fetched."

The AMC currently leads the Federation of Latin American Cinematographers (FELAFC), which was founded in 2015 and has been active throughout the pandemic.

For Diazmuñoz, it makes perfect sense that the Mexican film industry has found creative ways to continue on, despite the roadblocks of Covid-19. "We have very hard-working crews in Mexico. We go beyond the call of duty. We're problem-solvers, not problem-causers. Mexican filmmakers are warriors, and you'll definitely hear that from other people who travel to Mexico to work."

Estonia

Small Country, Big Initiatives By Leeni Linna

Estonia is a tiny country, which, due to our desirable geographical location, has been oppressed by regimes throughout the centuries, before regaining independence in 1991. Many Estonian families have a history of being victims of mass deportations and repressions. There is so much dramatic potential embedded in our history and our compelling true stories that the rest of the world has never even heard of. Perhaps that's why I've been drawn to telling stories that combine our dramatic experience with powerful, character-driven narratives. As

a culture, we have the best of both worlds: the Nordic sensibility and minimalistic approach, and, when we occasionally let the beast out, the untamable Viking rage of our ancestors. Wilderness is in our hearts and at our doorstep.

Our film industry plays a big role in our culture. We take great pride in our films, and seeing local films at cinemas has increased tremendously in recent years. There are numerous big productions going on year-round, and many of them are international co-productions. The latest buzz was about writer-director Christopher Nolan, who shot a big chunk of his latest film Tenet in Estonia with many great local professionals working on his crew.

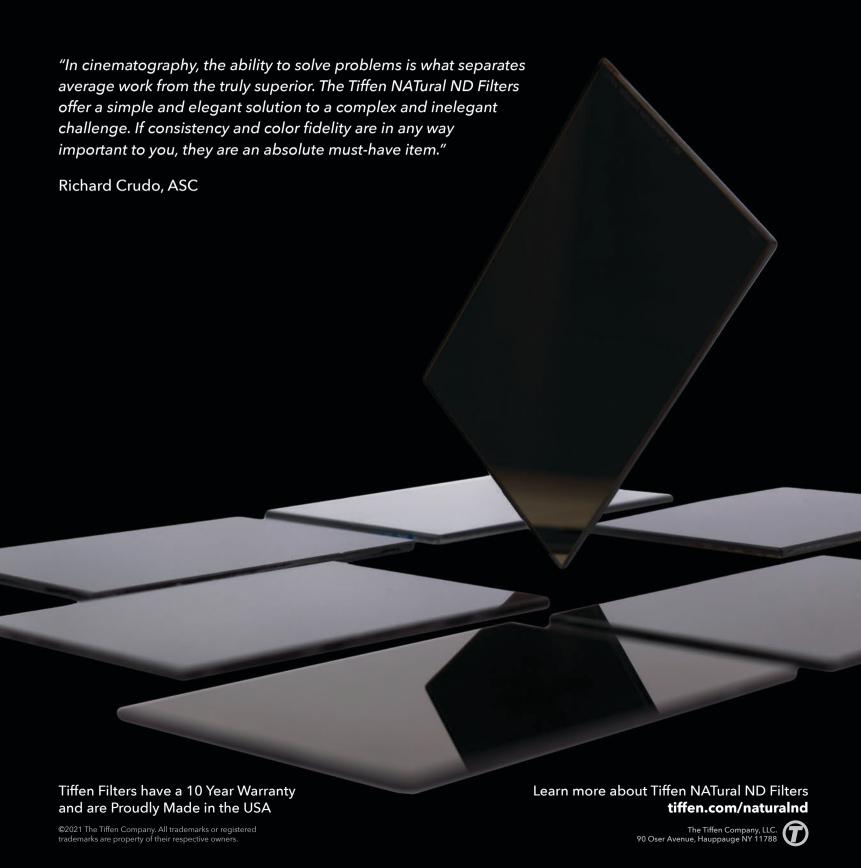
Estonia has two national filmmaking funding organizations — Estonian Film Institute and Cultural Endowment of Estonia - which both support film development, production, marketing and heritage. Estonian Film Institute also offers an incentive support scheme for international big-budget productions called Film Estonia, through which film and television production companies can receive a cash rebate of up to 30 percent on eligible local production costs. I'm very grateful to have had support from both of these institutions on a feature I'm currently developing and on several of my short films and documentaries. Thanks to their support, I have also been able to graduate with my masters from the New York Film Academy in Los Angeles.

I consider myself a very visual director and writer. A great cinematographer to me is like my right hand — someone who's attuned to my vision, a perfectionist like myself, and above all, a great person to be around. On two of my shorts I've had the privilege to work with one of the most humble and talented cinematographers, Rein Kotov, ESC, who photographed the feature Tangerines, which was nominated for an Oscar and Golden Globe. He's like a master of Zen. I've learned so much by having a well-accomplished DP like him by my side. I need to have full confidence that I can go into a battle with my DP — sometimes even literally. When I shot my documentary feature Blood *Type* [aka *Veregrupp*] — which shows the physically and mentally debilitating effects of war on young Estonian soldiers — with courageous cinematographer Mihkel Soe, ESC, we were on the front lines in Afghanistan.

Estonia has highly professional and talented film crews with substantial international big-budget production experience. Filmmakers from around the world have already discovered our country for its beautiful landscapes and high-tech solutions. It's easy to get things done. paperwork can be handled online, and there's no unnecessary bureaucracy. We're literally the best place to shoot because we're small and have a variety of locations: seaside, city life, medieval towns, forests, remote islands, and studios — and everything is at a close distance. \bullet



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Clubhouse News

Society Welcomes Johnson, Watters







New Society member **Kirsten Johnson, ASC** attended Brown University — where she studied fine arts, literature and society — before studying cinematography at La Fémis in Paris, France. She has served as cinematographer on a number of award-winning documentary features, including *Citizenfour*, which won the Academy Award for Best Documentary Feature; *The Invisible War*, nominated for the Best Documentary Feature Oscar; and *Pray the Devil Back to Hell*, honored with Best Documentary Feature Award at the Tribeca Film Festival. She was also an additional camera operator on *Fahrenheit 9/11*, which won the Palme d'Or at the Cannes Film Festival. For their camerawork on *The Oath*, Johnson and director Laura Poitras were awarded the Excellence in Cinematography Award for U.S. Documentary at the Sundance Film Festival.

Johnson directed and shot the acclaimed autobiographical documentary *Cameraperson*, which was shortlisted for an Academy Award, won the National Board of Review's Freedom of Expression prize, won three Cinema Eye Honors, and won the Grand Jury prize at nine international film festivals. The picture was named one of the best movies of 2016 by *The New York Times* and *The Washington Post* and is distributed by the Criterion Collection.

Her most recent feature as a director, *Dick Johnson Is Dead (AC Dec. '20)*, premiered at the 2020 Sundance Film Festival, where it won the Special Jury Award for Innovation in Non-Fiction Storytelling. The film also garnered Johnson two Critics' Choice Awards, for

Best Documentary Feature and Best Director. Her forthcoming credits include the documentary feature *Oscar's Comeback*.

Irish cinematographer **Cathal Watters, ASC, ISC** attended Trinity College Dublin and earned a degree in drama and theater studies. After graduating and earning a postgraduate degree, he was hired to shoot news segments for TG4, the national Irish-language public service broadcaster. He then transitioned to documentaries, which took him to locations around the globe. "I always wanted to shoot films, but at that time, I felt I needed to have a camera on my shoulder and learn about framing the world I was seeing," he says. Watters focused on photographing drama projects, including short films and music videos.

He shot his first narrative feature in 2014, *Dare to Be Wild*. His work on the feature *Viva* earned him an IFTA award for best cinematography, and his work on the television series *Dominion Creek* (aka *An Klondike*) earned him another nomination. His camerawork on the features *A Dark Song* and *Handsome Devil* has also been acknowledged with festival awards and nominations.

For his work on the BBC period crime series *Peaky Blinders*, Watters was nominated for an ASC Award, an IFTA Award and a Royal Television Society Award. His television work also includes *The Alienist: Angel of Darkness, Taken Down* and *Finding Joy*. His upcoming credits include the BBC thriller *Smother*.

For the latest updates, visit theasc.com/asc/news

New Episodes of Clubhouse Conversations

The ASC has resumed its popular Clubhouse Conversations series, featuring insightful interviews with leading filmmakers who discuss their creative process. The online video presentations highlight a wide array of award-contending productions. ASC members who are tentatively scheduled to moderate discussions include John Bailey, Richard Crudo, Buddy Squires, James Laxton, Patti Lee, M. David Mullen, Rodrigo Prieto, Armando Salas, Lawrence Sher, Eric Steelberg, Amelia Vincent and others. Conversations are available at ascmag.com/videos/clubhouse-conversations.



Clubhouse Conversations — Insecure

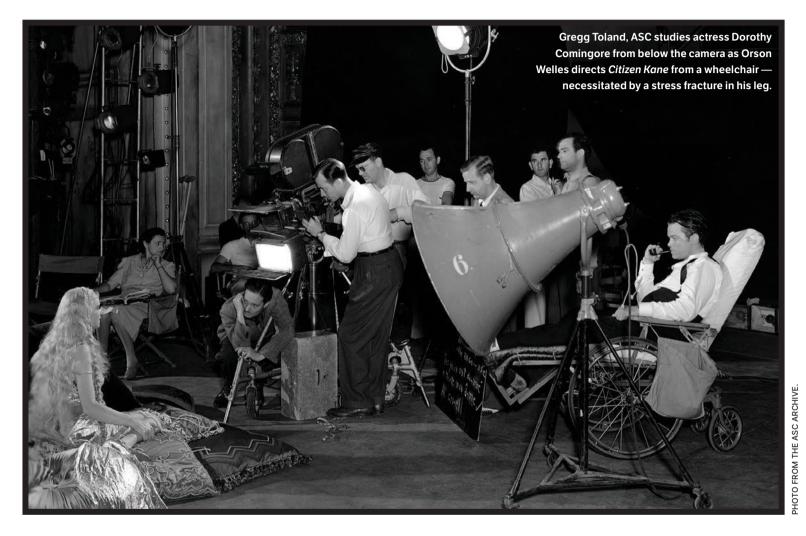


Clubhouse Conversations — Life Below Zero



Clubhouse Conversations — Mindhunter

Wrap ShotGregg Toland, ASC



point which many other far more experienced directors and producers never comprehend: that the scenes and sequences should flow together so smoothly that the audience would not be conscious of the mechanics of picture-making. And, in spite of the fact that his previous experience had been in directing for the stage and for radio, he had a full realization of the great power of the camera in conveying dramatic ideas without

recourse to words.

Therefore, from the moment the production began to take shape in script form, everything was planned with reference to what the camera could bring to the eyes of the audience.

Excerpted from Toland's article "Realism for Citizen Kane," published exactly 80 years ago in AC Feb. 1941. Our Archive subscribers can read the complete article, plus content from every issue of the magazine since 1920.

Citizen Kane is by no means a conventional, run-of-the-mill movie. Its keynote is realism. As we worked together over the script and the final, pre-production planning, both Orson Welles and I felt this, and felt that if it was possible, the picture should be brought to the screen in such a way that the audience would feel it was looking at reality, rather than merely at a movie.

Closely interrelated with this concept were two perplexing cinetechnical problems. In the first place, the settings for this production were designed to play a definite role in the picture — one as vital as any player's characterization. They were more

than mere backgrounds: they helped trace the rise and fall of the central character.

Secondly — but by no means of secondary importance — was Welles' concept of the visual flow of the picture. He instinctively grasped a



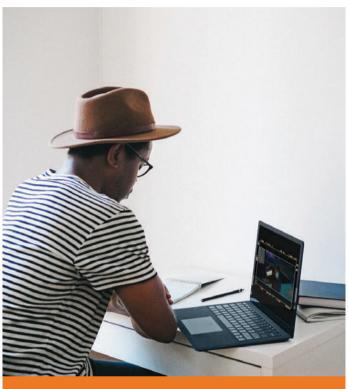


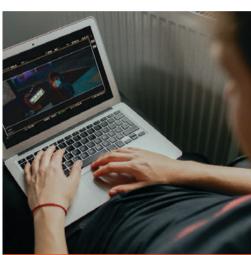












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A METAMORFOSE DOS PÁSSAROS (METAMORPHOSIS OF BIRDS) BAD EDUCATION BAIT BEGINNING BILLIE EILISH - "XANNY" DRAKE - "TOOSIE SLIDE" **EL TANGO DEL VIUDO Y SU ESPEJO DEFORMANTE** (THE TANGO OF THE WIDOWER AND ITS DISTORTING MIRROR) ÉTÉ 85 (SUMMER OF 85) EUPHORIA EYIMOFE (THIS IS MY DESIRE) FREAK POWER FÉVRIER (FEBRUARY) HALSEY - "GRAVEYARD" HARRY STYLES -"WATERMELON SUGAR" HOLLER とてつもなく大きな (HUMONGOUS!) I KNOW THIS **MUCH IS TRUE JAMES BLAKE - "CAN'T BELIEVE THE** WAY WE FLOW" JOYWAVE - "OBSESSION" KATY PERRY - "HARLEYS IN HAWAII" | LAST AND FIRST MEN LE SEL DES LARMES (THE SALT OF TEARS) LIZARD LOS CONDUCTOS LOVERS ROCK | MANGROVE MARE NEVER RARELY SOMETIMES ALWAYS ON THE ROCKS PARADISE DRIFTERS PASSION SIMPLE PREPARATIONS TO BE TOGETHER FOR AN UNKNOWN PERIOD OF TIME RED, WHITE AND BLUE RULES FOR WEREWOLVES SEPTET: THE STORY OF HONG KONG SOUS LE CIEL D'ALICE (SKIES OF LEBANON) SUCCESSION SUDDEN LIGHT | THE BANKER | THE EDDY THE FRENCH DISPATCH THE INHERITANCE THE KING OF STATEN ISLAND THE WORLD TO COME VAGABOND - "WATER ME DOWN" | WESTWORLD **ZANKA CONTACT**





All featured productions were made with KODAK Motion Picture Film stock and were released, shot or in production in 2019/2020.