Sabbatical Project: Independent study for Instructors in Fine Arts. Specifically to make an original short narrative film using current digital cinematography equipment anchored by a Hollywood-level camera to update my skill set in current digital workflow production practices.

#### Preproduction

After sabbatical approval, the initial task was to secure a script that was producible within my budget (\$5,000) and time frame. One of my mentors for this project, and a Film/Video Advisory Committee member Adrian DeLude, a colorist for Company 3, and I elected to develop an original story he had written. We met several times during the summer of 2016, collaborated on drafts by email, and ultimately he produced a 20 page script entitled *Arroyo*. Given that one of the most difficult things to accomplish when making a low budget, independent film is completing the project, we decided that Adrian would direct and that I would serve as executive producer to ensure we would finish the project.

Casting began in August with the intent of shooting by October. After two initial casting sessions in Hollywood, the lead actor and actress were selected and paperwork was initiated by me to become a signatory of the Screen Actors Guild as our lead actress was a member of SAG. As a signatory of the Guild, we were bound to comply with all their regulations.

Our October shoot dates were delayed as Mr. DeLude was called to London to work on *Transformers 5*. The initial setback was a blessing in disguise

as it gave me more time to finalize the crew and most importantly, secure the insurance and location permits which were extremely complex given one of our locations was in Moreno Valley.

Adrian and I continued to refine the script while he was on location in London. When he returned, rehearsals began in late October, shoot dates were rescheduled for early December in Long Beach and Riverside County. Crew was finalized in November as were the insurance, permits, and equipment rentals.

# Production

A focal point of my project was to shoot with a high-end digital cinema camera package. For a low budget film, this is typically the most expensive budget item. Fortunately, Mr. DeLude is a frequent collaborator with a top notch Hollywood Director of Photography, Mr. Tobias A. Schliessler, whose most recent film Disney's new *Beauty and the Beast* is in the theaters as I write this.

While these two were working on the recent Mark Wahlberg film *Patriots Day*, Tobias agreed to help our production and called in the proverbial favor to Keslow Camera, a major rental house in Los Angeles. With Mr. Schliessler's assistance, we secured a \$250,000 Sony F55 camera package pro bono. My 1<sup>st</sup> and 2<sup>nd</sup> Assistant Camera crew along with our assistant editor/data manager checked out the equipment on Thursday, December 15<sup>th</sup>. The process began at 7:30am and concluded at 5pm. As my crew prepped the camera, Mr. Gary Uchino, who heads their Filter Department, gave me a personal tour of the Keslow facility. Gary is also an Advisory Board member and an El Camino alumnus.

Our production schedule consisted of two days shooting at a private residence in Long Beach, one day in the desert just north of Palm Springs and one day at Thunder Studios in Long Beach. Cast and crew combined totaled 35 and production days were 12 hours maximum in order to comply with Screen Actors Guild rules. Principle photography was completed on December 19<sup>th</sup> at Thunder Studios.

### Postproduction

Unlike years past when actual film was the origination medium, postproduction begins on set with a DIT (Digital Imaging Technician) on a feature film or an assistant editor on a low budget film. This critical job includes backing up all the camera footage (data files), managing and logging the material, synchronizing picture with sound while the production team is shooting. Our assistant editor who handled these tasks was Oscar Vazquez, an El Camino alumnus who earned his AA in Film/Video here and his BA in Film & Electronic Arts from CSULB.

After the last day of the shoot, Oscar created a rough assembly for us to preview. Given Mr. DeLude was engaged at the time working on the new Disney production of *A Wrinkle in Time*, all cuts of the film were uploaded to Vimeo for us to preview. In mid-January, 2017, we had a rough cut of the film completed with dialog.

As the production was delayed and post production was now encroaching on my spring semester classes and Mr. Delude was scheduled to travel to Cleveland to work on the new Matthew McConaughey film *White Boy Rick* in late

February, we brought in the services of another editor, Christina Mar, to assist us.

By the start of the Spring 2017 semester, we had progressed to a fine cut that both Adrian and I approved. Furthermore, we concluded that we would need to shoot pick-ups (a few shots needed for completion). A shot list has been completed and the final footage will be filmed when Mr. DeLude returns from Cleveland. Once completed, the final shots will be added to the cut and postproduction sound will begin.

Professor Bill Georges of the Theatre Department and I have previously collaborated on sound design and he has generously agreed to do the post sound editing for *Arroyo* at his recording studio. Once sound is locked, our composer, Mr. Daniel Dombrowsky, will finalize the score. From there titles will be generated and then we will go to Company 3 where Mr. DeLude will match the RAW data files to our cut version, do the final color correcting, and output the finished movie. Then the project will be ready for a cast and crew screening and film festival submission.

### Professor as Student, Students as My Teachers

The main objective of my sabbatical work was to get back on set in order to practice contemporary production and postproduction processes and incorporate that knowledge into my classes. Two of my most important teachers for this project are former students. Mr. DeLude was a student of mine back in 1994 when I taught at UNLV and Mr. Vazquez was a student of mine here at El Camino where he currently works with me and Professor Laura Almo as a

teaching assistant in our production classes, oversees our equipment room, and serves as our Editing Lab supervisor. In sum, here are my SLOs (Sabbatical Learning Outcomes):

With the Sony F55 camera we were able to shoot in 4K RAW files, which is a high-end digital cinematography model used in feature filmmaking. The upside of shooting RAW is that you get the all of the RAW sensor data of the camera that allowed us to get as much color and image data as possible. This gives us latitude in postproduction for creating a much more "true" color image. This is what Mr. DeLude does for a living: he is a colorist who handles camera data and manipulates the final image in terms of color and exposure to meet the Director of Photography's requirements. As he puts it, "No longer do we expose film to light, now we shoot for data."

Because we shot RAW and it is so data intensive, we had to adjust our workflow on set and in postproduction. On set, we needed to make sure we had the hardware to accommodate RAW files, which are huge. This meant using high capacity RAID hard drives that allow for fast transfer speeds of about 450 mb/s. The total amount of raw footage shot for *Arroyo* was around 3TB.

After we wrapped on set, we had to color time the dailies. The RAW files from the F55 just contain data, so they have a "flat" negative look. The RAW files were given a preliminary coloring in Da Vinci Resolve, achieved with a proper studio monitor and workstation that could playback the RAW files. They were colored with the director and cinematographer present to create the specific "look" they decided was the most appropriate for the story.

Proxy files were then generated after coloring to create an editorial friendly workflow. The RAW files were transcoded/compressed to Apple Pro Res 422 files. This brings down the file size to a much more manageable 400GB which can then be edited on most computers without glitching or playback issues.

We decided to edit with Adobe Premiere. The upside of this is that Premiere allows for footage to just be dropped in and be edited quickly. The fact that we were not collaborating editorially and not doing multiple turnovers for this film allowed us to use Premiere as opposed to Avid. The project was organized and synced inside Premiere (matching sound to picture as image and sound are recorded on separate machines). We had to sync the traditional way by marrying the picture and sound with the clap of the slates. The more professional way would have been to sync with time code, but our sound gear did not allow for that, as El Camino does not own, yet, a sound recorder that can generate time code nor a time code slate

A rough assembly was done by Oscar and Adrian who then showed it to me and Christina Mar, the editor we brought in to assist us. Christina also edited inside the same Premiere project that Oscar generated. She uploaded various cuts in web-friendly formats on Vimeo for producer (me) and director's story notes (Adrian). Oscar, as the assistant editor, helped Christina set up the project and fine tune some small sound and SFX (sound effects) issues.

After the impending pick-ups are shot and edited into the current cut, we will progress to picture lock and then sound design will begin. The editors will

generate an XML or AAF file so the sound editor, Professor Georges, can relink the files in his software, sweeten the audio, and do the final mix, most likely in Logic.

The final stage will be to migrate the files to Da Vinci coloring software for the final corrections. The trick here is to relink the proxy files back to the original RAW files that will have the final color added to it. Some red flags could pop up here if the project isn't set up correctly thus coordination between the picture editors, the sound editor, and the post house is imperative to ensure the data is handled correctly at each phase of the process. It is important to create the final master version from the original RAW files to maximize resolution and give Adrian the color bit depth to properly finish the final film images at Hollywood standards.

If everything goes well, a final colored video and mastered soundtrack will be generated into specific screening formats. This could be a DCP (Digital Cinema Projection) for theater screenings or a simple H.264 for online screening, festival submission, or classroom use. This last phase will be completed at Company 3 with Mr. DeLude producing the deliverables.

## **Final Thoughts**

This has been, and continues to be a rewarding experience and I would like to thank the Sabbatical Committee for their support. Though the film is not quite completed, I have learned the processes I set out to study. Not only can I share these practices with my students, this experience will help me immensely with impending equipment purchases, specifically 4K digital cinema cameras

and color correction hardware/software, being funded by a Strong Workforce Education grant the Film Department recently received. Thus, my sabbatical work could not have come at a better time. Fade out.... KO