Talking about the tools we editors use to do our work can be a heated topic. It’s also something that is subject to radical change from software release to software release.

This chapter is a discussion of the NLEs that various editors use and the good and bad features of using those tools to cut feature films and TV shows. While this book was written to be “evergreen,” (the subject matter will always be relevant and fairly unchanging through the years), this chapter could easily be outdated by the time you read it. These are the thoughts of editors, mostly in the year 2015, but also dating back into 2014.

I have personally edited films in Final Cut Pro 7, Premiere and Avid. I have been on Avid the longest—since 1992—but have been on Premiere and FCP since about the turn of the century (2000). I have not adopted FCP-X personally, but have also done some editing in Resolve as well, though not for features or long-form.

This chapter is not broken down into topics. I did group the discussions with Premiere, then FCP-X, then Avid. The discussions are in fairly random order with each editor’s interview about this topic of NLEs included in its entirety before moving on the next editor. The goal is not to make one system seem better or worse than another. This is simply a recounting of each editor’s personal experiences with various NLEs. Sometimes the editors have not actually tried a competing NLE. I do have a personal bias towards Avid, but obviously, when interviewing high-level professionals, I was curious about their personal experiences, and my questions sought to shed light on the “why” of cutting on a certain NLE and the hazards and benefits of doing so.
Hullfish: One of the reasons I’m very interested in speaking to you—besides your pedigree as a multi-Oscar-winning editor—is that most of the editors I interview work on Avid, and you are one of the few major editors cutting in Premiere. Were you on Avid originally?

Kirk Baxter, Gone Girl: I’ve cut on Avid on music videos and commercials, but I’ve never cut a movie on it. Gone Girl was Premiere.

Hullfish: Zodiac was Fincher, so that would have been Final Cut, right? Curious Case of Benjamin Button was Final Cut?

Kirk Baxter: Yup.

Hullfish: I’ve only cut three films, but they’ve been one each on Final Cut, Avid and Premiere.

Kirk Baxter: What do you think of Premiere?

Hullfish: I think I like it better than I did Final Cut—and I’m a huge Apple fan and cut in FCP for many years—but Premiere is just very, very slow with a lot of media. If you cut on Premiere on short projects, like TV spots or promos, I think it’s great. I actually cut my Avid tutorials in Premiere! But when you get up to the level of a feature film - and your opinion is better than mine—it’s a little draggy, and launching the project takes forever. I mean, the project launches immediately, but it can be multiple minutes before you can do anything while the media is connecting. On an Avid, it’s much more responsive. But there’re a lot of good things to say about the editing tools in Premiere: many of them superior to Avid. Each of the NLEs has things in it that you miss when you move to one of the other platforms.

Kirk Baxter: I’m a terrible one to quote because I’m too kind of “vibey” to really track it. My take on Premiere was that it was extremely slow at first when we were doing Gone Girl but then we had engineers on hand and we had guys who were doing all of our storage, and they started changing how the brain of Premiere looked for everything when it was opening a drive or a project, so it didn’t have to locate every single clip in order to start playing. It just needed to start locating what you wanted so you could commence working, and in the background, it would be doing more. It sped things up by 10 times. What used to take 10 minutes to open up a project correctly without it stuttering and stepping got really reduced down to like two minutes or a minute and a half.

Hullfish: I wonder if those changes have made it into the main software or whether that was just for you, because that’s my big problem, too.

Kirk Baxter: It was a problem of mine, and they worked on it consistently, and by the end of the movie it was radically better. We’ve done one TV show with Fincher since then, and it was perfectly fine during that.

Hullfish: What TV show?
Kirk Baxter: Videosyncrasy for HBO, but David killed the show.

Hullfish: Why Premiere?

Kirk Baxter: Tyler Nelson, my assistant on all of David's movies, is the reason I'm on Premiere. He wanted to move it to Premiere for all of the After Effects that were going to take place and all the rest of it.

Hullfish: Are you going to keep cutting in Premiere?

Kirk Baxter: Yeah. You bet. I have a commercial office where we do television commercials in between films. There are like nine editors there now, and I think eight of nine work in Premiere.

Hullfish: What about the ninth?


Hullfish: What are the good things and the bad things about Premiere for you, and how do you use Premiere? Are you very keyboard driven? Are you in the timeline moving stuff with the mouse?

Kirk Baxter: I move things around with the mouse in the timeline . . . well, not with a mouse, but with a pen—a stylus. It's all very basic and simple, and it's a lot of muscle memory. I've logged so many hours in Premiere now that it's just repetition of motion, and if I have to stop and think about what my actions are, I find that a hindrance. So if anything's more than kind of one or two clicks away, it's a pain in the neck, and I don't want to have to deal with it. I'm very at ease with Premiere. I like it a lot. In terms of what I'm not happy I still wish—and I will until my dying day—that I could open two projects at once.

Hullfish: Why do you want to open two projects at once as a film editor? There's the film you're working on and . . . what else?

Kirk Baxter: Because if you're doing a movie the size of David's, you can't have it all in one project, so it gets broken up into reels, and as you're coming towards the end of the film, I find that in a given day you can be working on the entire length of the whole movie, so I might touch something in reel 1, reel 5, reel 7. And if David pops in to review with me, I have to talk about one section for two minutes, then close that reel and then open the next one and wait for all that to upload perfectly, and then play that little bit, then close that one and open to the next one. So I'd like to be able to have two things up at once.

Hullfish: I can't believe you can't have the entire film in one project! I had a conversation with a Premiere product guy a few years ago. I found that long projects in Premiere got very sloggy. And the Premiere guy said, “Well, real editors only cut in reels.” And I said, “OK, but you don't just want to watch one reel at a time.”

Kirk Baxter: Exactly.

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Hullfish: And I have to say, every Avid project I’ve ever worked in, and I’ve worked on very, very large Avid projects, the whole feature or TV show is all in a single project, so though Avid can’t have two projects open either, it doesn’t need to. Was House of Cards cut in Premiere as well?

Kirk Baxter: No. Final Cut.

Hullfish: Julian, you and your team were used to cutting in Avid. Tell me about your experience cutting in Premiere Pro CC. I’m cutting a feature in Premiere myself right now. We should compare notes!

Julian Clarke, Deadpool: Premiere is a pleasure to edit on in terms of putting a scene together; it’s a beautiful piece of software. But using it on a bigger VFX movie like this one is quite a new idea, and when you do something new, there are going to be challenges in how you plug it into established workflows.

Hullfish: I’ve edited in just about every editor and find there are definitely things in each that I like and miss when I move to another system. What did you really like about the switch to Premiere?

Julian Clarke: Premiere has some great features like its integration with After Effects, subframe audio editing and being able to media browse directly into my sound FX library without needing to encode it into a new media format. Also, using the tilde key to toggle your timeline to full screen is a great way to get your hands on the full breadth of your tracks really quickly.

Hullfish: Anything that took some getting used to?

Julian Clarke: Well, Premiere doesn’t yet allow multiple users to work inside the same project. So, we had to split our project file into separate reels to create a workaround, which meant you had to open and close Premiere to switch reels. Ultimately, the holy grail for Premiere would be to get everyone inside the same project like Unity or Isis, so that you don’t have to divide up your movie this way.

Hullfish: Any final thoughts on the NLE wars? Does it matter what you cut on? When I interviewed Joe Walker, he said, “If they shot a movie on wet string, I’d cut that.”

Julian Clarke: I think there are pros and cons to every editing system. In terms of the creative side to editing, I don’t find there is much difference what I edit on. And I think competition between the NLEs is healthy. I first learned editing with Final Cut Pro version 1 in 2000 and then switched over to using Avid around 2004. During this period Final Cut and Avid were really competing with one another, and I think it was a great time for both of their software development. Each version of Final Cut got better and incorporated more pro functionality, and Avid created DV express and moved away from its expensive hardware-only setups. Ultimately, the software from both companies got better for the editor. I hope we can go through a similar process now between Premiere and Avid, where they each have good ideas they can steal from the other.

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Hullfish: Vashi, you helped develop the workflow for Julian and the Deadpool team. Can you give us more detail on the nuts and bolts of how Premiere was used?

Vashi Nedomansky, Deadpool: I was brought on board by post-supervisor, Joan Bierman, to come in, but before I did that I sat down with both Tim Miller and Jennifer Miller at Blur and had a meeting before they even started shooting, probably a month before, and I was recommended by Adobe. I had previous experience training and working on Gone Girl. And before that, I had cut about eight years on Premiere Pro. I started with Bandito Brothers, which is a production company that made Need for Speed and Act of Valor. I was their lead editor for four years, and they were an entirely Adobe house from 2005 or 2006. So I had a lot of experience, and obviously, Premiere has come a long way since then. Sometimes it was crashing back then, so when I sat down with the Deadpool team, they asked, “So why would we want Premiere Pro? We don’t know it. We haven’t heard of it.” But the thing is that Tim Miller is good friends with David Fincher, and he wanted to see what they did to successfully get Gone Girl through post and whether that could be translated to Deadpool. Since I had worked on Gone Girl previously, they wanted me to come in and explain it to them and run them through what they should expect. It was mostly a technical meeting in terms of “What kind of computers should we have? What storage?” At the end of the day, every NLE is pretty much the same in terms of functionality—marking in, marking out, trimming, all that kind of stuff—but they wanted to stay ahead of the curve. They wanted to go with an NLE that was on the cutting edge of technology and always staying ahead of the curve, but also embracing everything that is there currently. At the end of the meeting, they were pretty confident that they wanted to build out because they were actually building five edit suites at their studios in Culver City. So that was a major investment on their part to build it out and commit to cutting with Premiere. So I think it was a combination of me having experience with Premiere, that Fincher had a good experience, and the desire to be able to handle effects and everything moving forward.

Hullfish: What would you say has changed in Premiere to make it better as a feature film editing tool even since Gone Girl?

Vashi Nedomansky: As a feature film editor myself, I’ve cut nine feature films—the last four of them on Premiere—and the reason I did those last four on Premiere is because of its flexibility, its power and its stability. I think, like other editors, I’ve cut on every other platform. For me, Premiere was the easiest to interact with, the easiest to customize. Once the power of the Mercury Engine underneath the hood was installed in about 2010, that opened up being able to cut natively in any format and any codec, which was crazy. Not having to transcode on any project—big or small—not only saves time and storage space but lets you cut right away. There’re lots of films I’ve worked on, and you’re on set and they literally pull the cards out, dump it in, and you’re cutting and showing the director immediately. That wasn’t possible in FCP7 or Media Composer at that time, especially with films shooting so many different formats. I mean, every film that comes out that was either shot on RED or ALEXA always has a 5D shot . . . always has a Blackmagic Cinema camera shot . . . always has
a GoPro shot . . . always has a Sony FS7 shot. Even if it's one shot, if you don't have to transcode, you get closer to the finish line creatively, and it gives you more time to play with the cut and finesse it. Between when post began on Deadpool and Gone Girl, Premiere is like an exponential step up.

Hullfish: What specifically has changed that has made your life on a feature easier?

Vashi Nedomansky: There’re a lot of changes. There are about 200 new features and bug-fixes and requests that were raised by Fincher's team over the stretch of Gone Girl that were eventually applied to the version that we were using. So sometimes it takes someone from out of your house to call up stuff and say, “This is what we need,” and you would have never thought of it. For example, one of the biggest things since Gone Girl is Render and Replace, which is standard in every issue of Premiere Pro. Because Fincher on Gone Girl and Miller on Deadpool had so many Dynamic Links in their timeline, obviously there’s a limit when you’re shooting in 4K, 5K, 6K, whatever it may be, once you use a couple of Dynamic Links and they’re active and you have both After Effects and Premiere open, it bogs down the system, especially with those high levels of information, so by with Render and Replace, with being able to swap it out with a Quicktime file that makes no hit on the processor is huge. We were doing split screens in both Gone Girl and effects that were being swapped out on the fly, so once you have a timeline of 50 or 60 shots like that in a reel, it’s so nice to have a Quicktime file from the Render and Replace function instead of dealing with an active, open Dynamic Link. So that’s a huge takeaway that saved our day so many times.

Hullfish: Render and Replace takes place in the background?

Vashi Nedomansky: No. You choose to do it. You have a shot in your timeline and let’s say you open up After Effects, you pull a key, you do something crazy . . . and when you come back to Premiere, all those effects from After Effects are live in your timeline and you right-click on the effect and you save “Render and Replace,” and it literally makes a Quicktime file, removes the After Effects composition that’s open—the link—so it’s now just an asset in your project. And what’s even better is that if you decide “I need to change something,” you can right-click and go back a step and go back and open up that After Effects project inside the link, and the render file will disappear, and when you do it again it will replace it with a more current version.

Hullfish: One of the things I was shocked in my interview with Kirk Baxter, who edited Gone Girl was that Premiere needed to have five or six separate projects—one of each reel of the movie—instead of the entire movie existing in a single project. Is that getting improved? That’s a crazy way to have to edit a movie.

Vashi Nedomansky: Over the last two versions some of the things they’ve been improving on is how long it takes to open a project. That’s an issue on any project. During the post of Gone Girl, they improved it by a factor of 10, so a reel that took 10 minutes to open only took one minute. And then during Deadpool, they improved it by another factor of 10 again. So
that same project that initially took 10 minutes was now only taking 10 seconds. So when the
director wants to see a cut or a shot, you can’t wait 10 minutes to open up a project or a reel,
so that was addressed. But most importantly, on most productions, going back to film days,
is it’s nice to be able to break the film down into components, like reels of about 20 minutes
each, only because when you’re handing off the sound or handing off to VFX, it’s easier to be
able to hand off a reel than the entire project. So it’s not a question of “you can’t do it,” it’s a
question of functionality of the workflow for the entire team in post-production. I know there
were six reels on Gone Girl and six reels on Deadpool and there were six reels on Hail Caesar.
But, I cut Sharknado II on one timeline, a project of 90 minutes. I cut a documentary last year
on PTSD using nine different codecs on a single timeline—90 minutes—so no reels, but
I wasn’t cutting in 4K and I just wanted to move forward, and as an editor, I like to have a
birds-eye view of my timeline. I can see the pacing, I can see the length of shots, and I can
better judge visually what I’m looking at and how far along I am and what the pacing is. So
you can do it on one timeline, or you can do it in several reels.

Hullfish: The film I’m cutting in Premiere right now is over two hours long, and it’s all in one
timeline. I do think it takes WAY too long to load up that project, but you only have to do that
time, as long as you don’t crash.

Vashi Nedomansky: If there’s convenience to that and you’re willing to wait that one time -
’cause after it’s loaded once, hypothetically you don’t have to open it again.

Hullfish: On Deadpool there was no transcoding of these giant files? You were actually using
RAW camera footage?

Vashi Nedomansky: We cut at 2K. We had the original Arri RAW files that were 2.8K, but they
were the full raster from the camera, so we used an extraction that was pulled off because we
had the film in 2.35, so the Quicktime ProRes files that were 2K were created and delivered,
which were a conversion of the ARRI RAW, then we had a matte to make our 2.35. We had to
have a couple of versions because the actual extraction was top-heavy—it was higher in the
frame, so you couldn’t just put a matte on the original image, because it would have been
centered, and our image was raised up, so we had to have a custom matte made for that, and
when we were cutting we wanted to see just the image and not the timecode and everything
running by, but the studio wanted to see the take and timecode, so there were two versions
that were being passed around in terms of all that, so it was a 2K ProRes timeline, which was
the same thing that “Gone Girl” did.

Hullfish: I don’t understand, because on the feature I’m cutting, we’ve got a slightly odd
aspect—essentially the same aspect as a full frame DCP—and to display that, we just created
our sequences with that exact aspect ratio, so there’s no matte needed at all.

Vashi Nedomansky: On the extraction of the Quicktimes, it was strange because of using the
upper part of the frame in the camera, so if we’d done that, they added black so our
extraction would be in the middle. So it was a weird process. We tried doing that off-set in

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Premiere, but if you pass off a clip to someone else with an off-set, then someone else would get it in VFX, and it would be off from what they expect, so we couldn’t do it that way, so we just had it done for the deliverables—the dailies. It’s not as confusing as it sounds.

Hullfish: How did they organize the project?

Vashi Nedomansky: That’s why I was brought in. The entire team was an Avid team coming in, and they had never cut on Premiere Pro, so all five editors that I worked with and trained for about three weeks before they started, they didn’t know Premiere. So my job was to make their transition as easy and seamless as possible. To make them comfortable on the platform. Also, because of the customizability, I literally set up five different screen setups because every single person wanted the screens somewhere else. Because of the panels, because they float, because they move, I just set it up exactly how they wanted it, and some people basically mimicked their Media Composer setup, some people went for something brand new because they had that option, and I shared my personal setup with them and three of them just said, “I’ll use that.” Also, the keyboard shortcuts, everybody maps their keyboards differently, so I spent a bunch of time with each person so that whatever they were doing felt as close to what they had before, and to be completely honest, within two days every single one of them was up and running and no issues in terms of “Where is something?” or “How do I do this?” because it was customized for them. Julian was cutting the first day. I sat with him for about eight hours, and he finally said, “Screw it, I’m going to just start cutting.” I came back later and he had a sequence done already. These are all top-tier editors, but it is hard to step into a new system and be comfortable.

Hullfish: You’ve cut on FCP7 and Avid?

Vashi Nedomansky: I’ve cut features on FCP7, Avid and Premiere Pro. I’m pretty fluent in all three only because as an editor I want to be hired, and I want to know what all the technologies are, and if you just say, “I’m a Final Cut Pro 7 editor,” you’re going to lose a lot of jobs. I think it’s our duty and our job as editors to become familiar with all the platforms because we’re being hired for our storytelling, our communication skills, not what platform we’re editing on.

Hullfish: The reason I asked is: there’s pretty common wisdom—and I’m interested in your perspective as one of the few people I know who, like me, have cut features in all three NLEs—that if you’re switching from Avid to Final Cut Pro, or Avid to Premiere, or Premiere to Avid, you don’t want to simply transpose the way you cut in the LAST NLE when you move to the NEXT NLE. You don’t want to try to force Premiere, for example, to work like you did in Avid. So if you make the transition from Avid to Premiere, what SHOULDN’T you do like Avid and what CAN you do like Avid?

Vashi Nedomansky: The first step to make them comfortable was to show them the features of Premiere that they weren’t even aware of. Because I’m an editor, I can relate to them editor-to-editor and not Adobe-to-editor. I’m not pushing anything on them, I’m only trying to help them. So I’m showing them stuff like, “You should be aware of this”—like the tilde key blew them away. Whenever you hit the tilde key, whatever panel you have active, that panel will go full screen.

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Hullfish: I love that feature . . . I miss that when I move back to Avid.

Vashi Nedomansky: It’s the littlest feature, but I’m surprised every platform doesn’t have it. When I showed them that, they said, “Wow, I just got a lot of real estate. Look how easy I can plow through dailies with that!” Or if they’re working on audio, they go over to the timeline and hit the tilde key and you’ve got the full-screen timeline. They can go horizontally or vertically as fast as they want. It’s just so much easier. My job was to show them the features that stand out in Premiere that other platforms don’t have. But, as you just said, don’t make it identical to what they had before, but show them the new features and options that I use that I want to share with them. The “pancake timeline” is something I named, but it’s been around forever. When you stack two timelines on top of each other, that’s something you couldn’t do in Avid, and they weren’t aware of. When I showed it to them, they said, “That’s so helpful.”

Hullfish: Describe this more . . . I’m not getting it.

Vashi Nedomansky: In your normal window you have a source monitor, program monitor and a timeline. So what you do is you open a second timeline, and you attach it underneath the first timeline, so you have two open timelines, one on top of each other. So whatever timeline is active, then that’s in your program monitor, and you can grab a clip from one timeline and drag it straight to the other timeline without changing tabs, without—like Avid—loading one timeline into the source and then swapping timeline views; with Premiere you can just mouse and click and drag between two timelines. So that allows you to put a 10-hour selects reel in one timeline and go through and grab whatever you want and put it into an empty timeline underneath and quickly build out an assembly or a cut or a finer selects reel. Without that, you’d be clicking on a shot and loading it in the source and then dragging it into an empty timeline. This allows you to more efficiently go through large amounts of footage with two active timelines.

Hullfish: A lot of the editors I’ve interviewed in the last year or two—many of them make selects reels, so that would be a great way to take those selects reels and get them into a real scene sequence.

Vashi Nedomansky: Absolutely. Correct. This is something Angus and Kirk did on all their films. That’s the way they edited in Final Cut 7, and I’ve seen it done in some other places, so I wanted to show them that. It’s just very efficient. I’ve done a couple of posts about it, so you can see more detail in those.

http://vashivisuals.com/adobe-cs6-5-editing-tips-for-music-videos/ (TIP #3)

http://vashivisuals.com/the-pancake-timeline-maximum-limit-is-24-hours/

Hullfish: Talk to me about organization. So you’ve got your project pane and in the project pane is . . . what?

Vashi Nedomansky: First of all, because you can only have one Premiere Pro project open at any given time (in a collaborative workflow with multiple editors), so on the main shared storage hard drive that everyone’s feeding off of, every editor had their own folder with their
name on it. And inside that folder was ONLY their latest cut of whatever they were working on. So Julian, the lead editor, he had a folder with six projects in it: Reel 1, Reel 2, Reel 3, Reel 4, Reel 5 and Reel 6. Everyone else was able to pull from that and make their changes and keep their most current project in their folder. The way, in Premiere—which is all about organization—the way it works in Premiere is that you can go into a project and pull a timeline and import that into your own project. It will just take the sequence. It will not duplicate the footage. Everybody is pointing at the same footage on the shared storage, and that imported version of the sequence will live in your project. So you’re going into the master project and taking a sequence out of it using the Media Browser and bringing it into yours. The most important thing to note with that function is that it’s non-destructive. You can look inside someone’s project, but you can’t make any changes to the sequence in THEIR project. You just copy it into YOUR project and then you can make changes. So what, in Avid terms, is sharing bins, in Premiere terms is just a timeline or sequence. So that was our organizational structure so that everyone knew what the latest version was and where it was.

**Hullfish:** One of the complaints Kirk had with Premiere was that when the director wanted to see reel 3 and they were working on reel 2, he’d have to shut down the reel 2 project and launch the reel 3 project, and it would take 10 minutes. So, to avoid that, you could have another project that held the sequences of every single reel?

**Vashi Nedomansky:** Correct. Totally. That’s how we did screenings. That’s what we did when we had to make a DCP. We’d just open a project, import the six most current reel sequences, and the project ONLY contained those six sequences. Also, since that time when Fincher and Baxter were working on *Gone Girl* that ten-fold improvement of speed has been implemented since then, so it’s less of a factor now. But that’s contingent on the size of the project and the resolution of the project.

**Hullfish:** Those 2K files you said you used? Some dailies company probably produced those for you, right?

**Vashi Nedomansky:** Correct. We had the ARRI RAW because we were doing the VFX in-house, so we had to have the original source material, but we had the 2K source material being generated on-set.

**Hullfish:** On Avid, I know how the metadata transfer takes place to get you linked from the 2K Quicktime back to the original RAW file, but how does that work in your workflow? So in Premiere, if you have a shot that’s ready to be handed off to VFX, how do you link back to the original RAW camera file?

**Vashi Nedomansky:** We did have the metadata in the ProRes, but since everything was named the same and everything was in-house, I think they just used a search for the filename. The editing team all had Premiere on their systems, and they were on After Effects as well, so we were just handing over via the latest project. It was just that simple. We also were using Filemaker and Intelligent Assistant. We had some third party software that was being
implemented as well. As you said, there’s a certain way that every studio wants stuff handed off, like with sound, so we used XML export out of Premiere Pro to deliver thumbnails, per their request to share internally. We used Intelligent Assistance’s Change List software to help match the AAF outputs in an Avid workflow for sharing information amongst post-production divisions.

I know that Phil Hodgetts definitely made some changes for us specifically, which was really cool because it was a functionality that we needed because these Avid editors, with their pre-existing workflows that they were comfortable with their hand-offs, he made the changes to allow that.

**Hullfish:** So why switch a bunch of Avid editors over to Premiere? What were the things that they were able to exploit in Premiere and the Adobe universe that couldn’t have been done in Avid to make *Deadpool* efficient to edit in?

**Vashi Nedomansky:** I think because of the heavy VFX workflow and the opportunity to test out Dynamic Linking and the ability to have everything come out of Premiere as a hub and the history with Fincher and his experiences. Initially, there were discussions of trying to cut at 3K or even 4K, so that right away ruled out any other NLE, be it Avid or whatever else.

**Hullfish:** I thought FCP-X could do 4K native.

**Vashi Nedomansky:** Well, I ran a huge number of tests to see how many 4K and 5K files we could play, how much effects stuff could we have and handle. So we really pushed the limit to see what was possible and that was part of the process. Given the technology and the tools, we wanted to see how far we could push it, and we felt we should go at 2K . . . I don’t know if Avid could even do 2K when we started. I know it was locked in HD for a while. You’d know better than me what Avid could do.

**Hullfish:** I think that 2K and 4K were introduced for Avid somewhere in the fall of 2014. We had to cut *War Room* in 1080p because we started that in June of 2014.

**Vashi Nedomansky:** The other thing was that there was no limitation to the audio tracks in Premiere with a big action film with very, very deep sonic beds and sound effects going on. Just for Julian and Matt, the first assistant, they’re building 35 tracks deep of audio. With these action films, you can’t preview it without having it totally fleshed out with good sound design. It looks silly.

**Hullfish:** I agree that is a major consideration . . . just earlier this week when we recorded this, Avid announced 64 tracks of audio . . . finally. But it definitely would have been a consideration a year ago.

**Vashi Nedomansky:** I made the editors a lot of audio pre-set effects, like telephone voice, and even we made some pre-set visual effects in addition to the pre-existing visual effects that are already built into Premiere, which are incredibly powerful; I built a bunch of custom visual effects and also had a friend of mine, Jarle Leirpoll, who also does work on Premiere, he contributed some handheld real time camera shake effects of various varieties all based on

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keyframes he pulled from real cameras, so it wasn’t a wiggle function, it wasn’t a fake digital shake, it was actually mapped from real camera moves. So they were using those on shots that were locked off, but they wanted them to feel handheld or give a little of that organic motion, and that was all real time and you didn’t have to go someplace else to do that. We did it all inside Premiere.

Hullfish: Let’s talk about the Dynamic Linking. Was there somebody on the team . . . were there VFX houses that were not local to the editing team?

Vashi Nedomansky: There were over 1100 VFX shots. So we had to go through different iterations obviously. It sometimes started with just a slug or a card. Then it would go to a wireframe animation. Sometimes there would be just a drawing that we animated for timing. So it went from simple things to more complicated stuff, and the editors and assistants were doing their own VFX to temp it out and also just for timing. You know how important it is to get the timing right when you’re doing an effect. So they were using Dynamic Linking as much as they could to give the VFX team the best idea.

Hullfish: Did they do any Dynamic Linking to Adobe Audition?

Vashi Nedomansky: I don’t think there was a need to. They were able to do all the editing and mix inside Premiere. Julian and Matt were both amazing with audio, and there was no need to go to Audition.

Hullfish: There’s a lot of stuff in Audition that I love, so I find myself going back and forth to Audition . . .

Vashi Nedomansky: I send stuff to Audition all day long because I know Audition so well.

Hullfish: But nobody else on the team was as comfortable in Audition as you.

Vashi Nedomansky: Yeah. I think it was enough to be learning Premiere. I don’t think they wanted to be taking on another app, but more importantly, everything they really needed was inside of Premiere anyway.

Hullfish: As I move back and forth between apps, there’s always something you miss that’s in the OTHER application. What were some of those things where you were so glad you were in Premiere?

Vashi Nedomansky: The editors wanted to do multi-cam, but they wanted to do multi-cam so that when you hit Matchframe it would go back to the original camera with all of the original six production channels. The way that happens in Avid is the reverse of what happens in Premiere Pro. So they were saying, “This is what we want, but in reverse.” Then Matt, who had never used Premiere Pro was just messing around, and he hit some button that switched it to work exactly the way he wanted, and we didn’t even know Premiere could do that. He solved the problem as a new user before I could even be called in to address it.

Hullfish: Just because it was somewhat intuitive?
Vashi Nedomansky: Yeah. He knew the functionality he wanted to match the previous workflow for multi-cam and did it by accident. After that, that's the way he did all of the dailies, syncing through multi-cam from that point on, just so it would match the way Julian was used to seeing it in Avid.

Hullfish: Tell me about how multi-cam was used and how many cameras were going on and how were they organizing the multi-cam in the bins.

Vashi Nedomansky: Matt was getting them in and syncing them—just grab two shots, right-click, Make Multi-cam. You get to choose which audio channel is going to be playing initially so you know you’re just getting the stereo mix usually. If you wanted to assign it to a lav, it would create the multi-clip with just that, and obviously, you could change that later. So he could also do it by bulk. Grab an entire folder of a scene and grab all of them, you can quickly multi-cam clip everything in there and make your isolations visible. Most of the time it was two cameras. On all of the heavier action scenes and fight scenes, there were definitely more cameras. I think Tim said that at some point they were using seven or eight on some of the bigger gags. But most of it was two camera.

Hullfish: How did that collaborative process work in Premiere? One of the things that's typically attributed to Avid as its strong suit is the collaborative workflow. Obviously, for Deadpool you guys needed to collaborate as well.

Vashi Nedomansky: Twofold: We had six edit bays once we were all up and running. Everyone is pulling off the same open drive system that Jeff Brue created specifically for this project—an entirely solid state, hugely immense storage. He’s the same guy that set up Gone Girl so that was just an extension of that with more drives. Talking to Tim, I think he said he shot more footage than Fincher did on Gone Girl and that was 550 hours on Gone Girl, so if his math is right, then Deadpool was over 550 hours. That all lived on the open drive on one system. Six people pulling off of it, and collaboration was just communication. Each editor and each bay had their own folder with their name on it—as I said before—their most current work would be in there. And they would have other folders for where their previous work was. So that way you don’t have to call someone and say, “Hey, where’s your latest cut?” If you went to their folder, you’d know that whatever is in there is the most current. And we never had any issues. No showstoppers in terms of the shared storage or anything like that. So you can share, collaborate in Premiere very well. Six isn’t a large number, but about six months before that I had worked with Time Warner Sports in Los Angeles in El Segundo, and they had just transferred from FCP7 to Premiere Pro, and I trained 65 editors over two weeks, and all of them had bays, and they were running 30 edit bays off the same storage. They have five or six deadlines every day, and they have to broadcast, so you can’t have any screw-ups, and they were fine.

Hullfish: But there’s a difference between sharing media and sharing a project.

Vashi Nedomansky: True, but the projects are so small. It was just sharing sequences and pulling that sequence into your own project as I explained before. That was the way we worked. So if Julian said, “I’m done with Reel 1. Let’s drop some VFX in it.” I would go into
Media Browser, I would see his latest project, which was the only one in his folder, I would right-click and choose Import. It would open his project in my Media Browser. I could see his sequences. I could see Reel 1. I just grabbed it and imported it. That sequence would be imported into my project and would live in my project window. Because it’s not pulling duplicate media over, it’s just the pointers or EDL, there’s no size to it, and that footage is already in my project because I’m on the shared storage.

Hullfish: Love it. That’s awesome. Who were those other people hanging off of the shared storage other than Julian and his assistant, Matt?

Vashi Nedomansky: The VFX editor who was constantly updating the latest shots coming back from internal VFX and external vendors.

Hullfish: When you are replacing effects like that with Dynamic Linking or you’re doing the keying right in Premiere, and you’re switching from what you personally created as the editor and what the VFX house has created, are you maintaining the original edit choices so you can go back to your own edit? So let’s say I add a green screen performance to a plate . . . that gets sent off to the VFX guys and comes back . . . in MANY workflows, that VFX shot gets added in a layer ABOVE the work I actually did, that way, if the performance needs to change or the timing needs to change, I can dump the VFX shot on the top track and go right back to my own rough comp so I can change the performance or timing or positioning or whatever while I wait for the VFX house to create the revised final effect.

Vashi Nedomansky: We were doing the exact same thing in Premiere . . . just stacking the timeline . . . sometimes seven different iterations going vertically. It’s much easier to do that. So that was something Matt was doing. It was always available. For Julian’s timeline, we were trying to keep that as lean as possible, but he always had access to the original.

Hullfish: And were they doing the same thing with sound? Were there sound hand-offs as well?

Vashi Nedomansky: Until we finally sent it in for the final mix, everything was done inside of Premiere. That’s how good these guys are—Julian and Matt. They had the sound built out so deep, so until we sent off the reels for final mix, we didn’t have anything coming or going like that. We were doing our own mixes along the way.

Hullfish: In stereo only or were they mixing in surround?

Vashi Nedomansky: Surround. The rooms were all built for surround. They’re all 5.1. This is the kind of movie where you want the sound to wrap around you for sure.

**FINAL CUT PRO X (FCP-X)**

Hullfish: Jan, you’ve cut two movies on FCP-X now.

Jan Kovac, *Whiskey Tango Foxtrot: Focus* and now *Whiskey Tango Foxtrot.*

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Hullfish: What did you use before FCP-X?

Jan Kovac: Mostly Final Cut 7. Avid also, but I haven’t cut on Avid since 2011. I’m on lynda.com re-learning as we speak. In 2012 I started to do small file-based projects in FCP-X.

Hullfish: Talk to me about organizing those movies in FCP-X.

Jan Kovac: Final Cut X has keywording. It doesn’t have bins at all. You could maybe call them bins, but multiple clips or multiple parts of one clip can belong to more than one keyword collection. So if you have a keyword for John’s faves or my faves or Glenn’s faves, then I can have one take belong to all three of them and be searchable. So the take or the part of the take or multiple parts of the take don’t just belong to one “bin.” I hesitate to call them bins.

Hullfish: So describe to me how your assistants set up your dailies for you to edit.

Jan Kovac: I have them use the reject function and reject regions before “action” and after “cut.” And if we shoot a series without cutting, then they reject the dead space between takes. The dailies can then be viewed without those regions, so everything shows up starting on “action” and ending with “cut.”

Hullfish: So if the footage isn’t in a “bin” then how do you track down all of the shots for a specific scene? For example, scene 12.

Jan Kovac: They would show up in my Scene 12 event, and they are broken down into two views: list view, which shows the entire take on top, and underneath of it I have my assistants input the scripty’s notes (script supervisor’s notes) in the Notes field, which is automated. So I can quickly see, for example, in this take, 12-d take 3, it’s a series of two, and my A camera is over-shoulder Fahim, crossing over to medium shot of Kim, moving into a full shot including Brian and that it’s a circled take and my B-cam is a POV of Kim’s that is roving around. That’s in the list view. I can check immediately what’s on it—what the camera moves are in my notes field, plus I see that individual clip with audio waveform on top which I can skim through. Or I can use the film-strip view, which lets me see the entire clip that you can skim through and choose regions and mark regions, so that’s the two windows I work in. We are trying to find an answer to Avid’s ScriptSync because John and Glenn really like to audition performances later in the process. They’ll ask to see all of the takes of a given line and need quick access to it. We came up with this wording system where we number the lines of dialogue in a scene and those numbers re-set with every scene. So we keyword “L1-3,” then “L4-6,” then “L7-9” and “L10-12.” Then we have these regions that can be easily previewed or auditioned . . . I see you are confused. Let me send you some screengrabs.

Hullfish: I kind of like doing these interviews on video Skype! I’ve done three of them with video—you and Lee Smith and Joe Walker. It’s nice you can see my confusion. OK, I have one of the screengrabs up.

Jan Kovac: This is the film-strip view. I can squeeze all takes into one-frame representation, or I can have them as long as the take is and play or skim through them and select parts I like.

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It’s easy to go through the scene really quick. I think it’s a great visual way to absorb the coverage you got. And if you see the highlight on the left side that says, “L1-3,” those are the keywords that would represent the regions indicating lines 1-3 of that scene.

**Hullfish:** So what do the little blue dots represent on the thumbnails?

**Jan Kovac:** Those are markers. If you go to the top clip, you see the first clip—the green marker is my “action” marker. That’s where action starts. My assistants mark in the series where each “action” is. The blue markers are the lines. So in the list view, those markers correspond to keywords for each three-line set of dialogue in each scene.

**Hullfish:** So you can jump to any line in any clip using keywords?

**Jan Kovac:** Correct. Or if I click on that keyword, it’s going to filter the view, and it will only show me those lines. If I’m auditioning line 5, I play that keyword and I see just that line for all of the takes.

**Hullfish:** That’s very interesting. So I’m looking at 3:21:26PM screenshot. That is all of your coverage for that particular scene?

**Jan Kovac:** No. That’s just for lines 1-3.

**Hullfish:** Ahhh. And the green markers mean “action,” so we’re looking at maybe 12 takes or setups for lines 1-3?

**Jan Kovac:** Yes.

**Hullfish:** Then you can roll through just that line for all takes. Interesting.

**Jan Kovac:** I can just audition those. Find the best take. For example, if you click on 3:20:54PM, that shows me the coverage for the entire scene without selecting lines 1-3. This was something I wanted to change from Focus. On Focus I had my assistants select the region ending at the end of line 3 on the script, but the problem was that I could only see lines 1-3 and not the rest of the scene continuing on. It was basically like a subclip in Avid. So, on Whiskey Tango Foxtrot we just mark an in on the first part of the line and no out.

**Hullfish:** And every blue marker is a section representing three lines of dialogue.

**Jan Kovac:** I’m looking for the list view that would explain it better. 2:23:37PM. So this is the list view. I still have my visual representation of the clip, which is great. I can skim or play through it. I can see my waveforms. And then I have my script notes in the notes field, so you can glimpse at it and see in take 12a-1 we move in on Fahim for a close-up . . . then we find Kim and Nick and that then moves to the close-up of Brian over Kim.

**Hullfish:** (Laughs)

**Jan Kovac:** This is basically the organization we have at the beginning of the movie. Each scene has its own event, and it’s in one big library. This time around we created small sequences...
or mini-reels so we could work not just within scenes and not in long reels, but in beats of three to six scenes. It was easy to share, and it gave us a better sense of rhythm than working in individual scenes, and it was easy to share with Glenn and John who are my co-editors.

While shooting, they are in the directing zone, and I do most of the cutting, but once we’re into post, we set up a room for John and Glenn. Glenn has a system. John has an extra screen, and we basically start going through every permutation of collaboration there is. Sometimes Glenn cuts and I cut, and John works with him then he works with me. Sometimes they both work with me. Sometimes I do notes on their scenes. Sometimes they do notes on my scenes. It changes throughout the process and moves slowly towards a more traditional director/editor relationship at the end.

**Hullfish:** With that screenshot 2:22:37 there are a bunch of icons with four little boxes. Does that mean they’re all multi-cam?

**Jan Kovac:** Yes. That means multi-cam. Most of the film was multi-cam. I’d say, more than 90%. Same as *Focus*. I think Final Cut’s multi-cam interface is the best while in it and is great for intuitive editing, but it gets a bit complicated when you get into split screens where you want to pace up the performances and join performances from different takes together with a split.

**Hullfish:** So when you’re trying to do those using a multi-cam, Final Cut doesn’t handle those well right now?

**Jan Kovac:** For Optical Flow and planar tracking, the multi-cam does not function as single cam, which means I cannot track on that shot. I cannot copy my tracking markers from a single shot to multi or do multiflow re-speeds. I have to match back to a single cam, which gets cumbersome. Also, we love the Audition tool in FCP-X where you can cut four different versions of a take into your timeline and preview it within the context and cycle through all the versions. It’s an amazing tool, but that doesn’t work with multi-cams. It would be great to have these tools available in the multi-cam world.

**Hullfish:** Especially since almost every movie made nowadays is shot multi-cam. Everybody is shooting with at least two simultaneous cameras.

**Jan Kovac:** That’s true. Absolutely.

**Hullfish:** So, I’m looking at screenshot 2:23:37PM, and I see that you’ve got the 12d3SRX2 highlighted down in the list view. Does that mean that the waveform and thumbnails along the top is that shot?

**Jan Kovac:** Yes. That is correct. You just do up arrow and down arrow, and that will walk you through the other cameras. If you click on the arrow on the left, it opens the markers and the descriptions. Look at 2:23:52PM. That clip is open with the information marked and prepped by the assistants.

**Hullfish:** So all the markers are the markers that jump you to certain lines?
Jan Kovac: The key symbol is a keyword. It shows that it was shot on day 2 and the time. It shows you it's ARRI. Then I have my action mark. SERx2 means series and that I have two “actions” in that series. It's represented by two green markers: action and action1. Then I do have Line 1-3, then marker 4, marker 5, so you can see I have three markers for lines. There is also an alt that wasn’t in the book. Can you see that there's an adlib under marker 12?

Hullfish: “You’re not allergic to hookah?” That's really fascinating to me. It would take some getting used to, but I can definitely see the power of this. But just like with ScriptSync in Avid, this is going to take some serious prep for the assistants. It’s a lot of man-hours to get this ready.

Jan Kovac: If we shoot on Monday, to get all this prepped, I would get it Tuesday evening at the earliest or Wednesday morning. So it’s a full day of prep to get all of this done. During production, I had two assistants and an apprentice and a PA. We were also syncing dailies. So they had that on their plate also.

Hullfish: So they were getting double-system sound from production audio and camera department stuff. Was stuff getting transcoded?

Jan Kovac: One of the reasons we chose Final Cut was that we wanted to work in highest possible resolution, basically in the O-neg resolution. The bulk of the work is Alexa. ARRI and Apple developed a new codec, which is 4:4:4:4XQ, which allowed us to completely skip ARRI RAW. Even for the green screens. Everything was shot in ProRes. The big advantage was the VFX workflow and the fact that it looks the same on our system as it’s going to look in the theater, only it hasn’t been colored yet. The only change between the dailies that I am looking at and the O-neg is that there is a CDL (color decision list) value burned in on set, but there is no LUT on it. The LUT is being applied as we go in Final Cut.

Hullfish: So you’re seeing it LUTed to REC-709?

Jan Kovac: Yes. Final Cut translates it directly to REC-709 once you apply the LUT. But it does not disturb the clip. It stays LOG-C all the way through.

Hullfish: So these clips in the screengrabs—in your system—are actually referring to the ARRI ProRes files that were being recorded on-set?

Jan Kovac: Yes. The three big advantages of editing in the highest resolution and in ProRes from the get-go is that all your DCPs that are created throughout the process (for screenings) look amazing, and you get a much better feedback since there is a lesser amount of technical imperfections your audience can bump on. And the second really good thing was that since we didn’t have to deal with ARRI RAW, editorial could carry a copy of the o-neg for our in-house VFX crew. We had 1200 VFX shots—it's hard to create Afghanistan in New Mexico, so there was a lot of small stuff to do. We would not be able to do that if we had to go to outside vendors, but we had a lot of VFX artists in-house—at some point 20 of them—and I carried the O-neg on my SAN. I had one chassis just for the O-neg, so they were working
straight from that with us. They figured out a color pipeline and there was no pulling frames. No waiting for the DI house to give it back to you. No dealing with different vendors. We could see shots immediately and make small changes as we went. It was a big financial savings, but for me, it was mostly creative because it gave us more time on temps, and all the temps we worked on—even in Final Cut—were a real step towards the final. It wasn’t like you were just working on a temp and threw that work away. When you worked on a temp, as it was getting approved, it was becoming the final. And the third reason for working this way was, that it allowed Glenn and John to shoot faster. They didn’t have to worry about a microphone being in a scene for example. They could concentrate on getting the performance they wanted since they knew we could take care of stuff like that later.

**Hullfish:** How were you doing hand-offs to VFX then?

**Jan Kovac:** That was my assistants, but I know the back part. They would cut it back to me into my timeline. Kevin Bailey was our first assistant and he could tell you. It worked great. But for basics, if you go to the first screengrab with the Paramount logo on it . . .

**Hullfish:** 1:12:46.

**Jan Kovac:** See the orange markers? Final Cut has three kinds of markers. You can’t change colors on them. It would be nice if you could. But they are all searchable. But the red ones are me leaving notes for my assistants on stuff to do. Once they’re done, they become green markers. The blue ones I already told you about. The orange ones are chapter markers, which we are using to mark VFX with. You can see the stuff that’s above them are the VFX shots that are cut in over the originals.

**Hullfish:** How long is this timeline?

**Jan Kovac:** That’s a 20-minute reel. If you go to the next one, I can explain about the roles.

**Hullfish:** Ah yes. Roles. (From FCP-X manual: “Final Cut Pro assigns an audio role (Dialogue, Music, or Effects) to the audio portion of all clips on import. Role assignments make it easy to organize clips by audio type, but their most powerful benefit is the ease with which you can export separate files (called media stems) from Final Cut Pro for all dialogue, music or effects clips. This process is often used when delivering stems to match broadcast specifications or when handing off stems for mixing or post-production.”) 2:22:41 screenshot.

**Jan Kovac:** I have our assistants mark everything that comes in with a role. You see on the left a dialogue role. Underneath that, every microphone has its own role. You have Afghan, Angry woman, boom and so forth.

**Hullfish:** This is off to the left side, where it’s blue it says “dialogue.”

**Jan Kovac:** If you organize tracks, they’re by numbers onto which you put your content, and you have to decide which number corresponds with what microphone. Here in Final Cut, it’s just organized based on content. It’s not organized with tracks, it jumps all over. But you see
how I have the dialogue selected? See how it’s highlighted in the lighter shade of green? It’s really easy to orient yourself.

**Hullfish:** So the dialogue clips are actually spread out all over the place, but because they have been assigned to a role, that doesn’t matter?

**Jan Kovac:** My assistants hated me for it, but when I’m working I like to put some stuff above picture because it doesn’t matter in the Final Cut, but they couldn’t get over that so I started putting it below.

**Hullfish:** That’s all well and good until you have to deliver it to an audio mix house. So you go through a 3rd party app to get it to a mixer?

**Jan Kovac:** Yeah. It goes through X2Pro (http://www.x2pro.net/). It’s a plugin that basically takes the roles and assigns them to tracks. So FX would be living on tracks 14 to 18 and what not. And it creates your AAF for ProTools. If you go to 3:23:17PM . . . here you see the waveforms. That’s more the way it looks when I’m working on it. I love in Final Cut that it edits in subframe—I believe 1/80th of a second. It’s really great for cutting music. That makes a huge difference. Plus if you would select part of the clip and wanted to duck, you grab the solid line in the middle which represents your level, drag it down and duck it, and it automatically adds the keyframes, so it adds little two-frame fades on each side so you don’t have to click and put keyframes on it. Then you can make the fades faster or slower. When I was working in the trailer it was LCR (left, right center), with all dialogue center. Once we landed in post we worked in 5.1, Kevin, my first (assistant) did most of the sound work behind me. And if you go to the last screenshot—3:27:41 . . .

**Hullfish:** But back on 3:23:17, you’ve got dialogue selected. So Dialogue is the role or each individual mic is the role?

**Jan Kovac:** You could go down to the microphone, but here all dialogue is selected as a role. You see the production that’s part of the picture that’s lighter blue . . .

**Hullfish:** So above the green is a blue section. And above that is kind of a purple section.

**Jan Kovac:** Yeah, the purple section is the color adjustment. That’s a color layer for making the DCPs.

**Hullfish:** So there’s the green section below, and you said that the light green stuff is the dialogue.

**Jan Kovac:** Then production that is synced with the picture is part of the blue clip—that’s lighter blue, that’s dialogue, you can see it has a waveform. There’s a Paramount logo at the beginning with music, which is not dialogue, so it’s darker blue, it’s not lighter blue.

**Hullfish:** So the lighter blue stuff is the dialogue?

**Jan Kovac:** Lighter blue and lighter green both.

**Hullfish:** So what’s the difference between the blue stuff and the green stuff?
Jan Kovac: The blue stuff is tied to the clip, and the green stuff is from someplace else moved underneath the picture.

Hullfish: Wow. That's a lot of moved, unlinked dialogue!

Jan Kovac: That was a party scene, so it's people singing and multiple layered voices.

Hullfish: Holy smokes. That's pretty elaborate. I don't want to beat FCP-X to death, although it's fascinating to look at. So this is a comedy.

Jan Kovac: It's a war comedy set in Afghanistan at the time when we went to war with Iraq so there's a shortage of journalists covering the war, and Tina Fey's character volunteers to go there and finds herself in the world she knows little about, and it's about how she reacts to it and adjusts to it. It's based on a book by Kim Barker, who covered Afghanistan during that time.

Hullfish: Glenn, you did quite a bit of cutting with Jan on this movie, any thoughts on FCP-X?

Glenn Ficarra, Whiskey Tango Foxtrot: It just lets me spend more time editing and less time preparing to edit. It's just really just powerful and gets as deep as you need to get. We've gotten pretty deep with it, but you can approach it at a very simple level or go in and really exploit the depths of the database and the organizational features. It was really great. I haven't used Premiere much, but Premiere looks really fun too.

Hullfish: Jan was the first one to really explain the power of the database stuff to me, and my thought as a guy who's cut a few features had been, "Yeah, but FCP-X can't do all of the organizational stuff that you need to do a feature film," and it was very interesting to have him show me how you guys were pulling that off very effectively inside of FCP-X.

Glenn Ficarra: Actually I think it's even more powerful. And we barely scratched the surface of it because the way you can do things can get really interesting. And I don't think there's any one workflow just yet. We experimented on stuff with Focus and changed it for this movie, and I think we'll even go even deeper next time.

Hullfish: Clayton, you're another FCP-X editor. Tell me about organizing a dramatic scripted feature in FCP-X. How did you prep or organize materials for a scene?

Clayton Condit, Voice from the Stone: FCP-X terminology initially throws people off. So to clarify, what Avid calls a project is called a library. The timeline in FCP-X is called a project. How did you prep or organize materials for a scene?

Clayton Condit, Voice from the Stone: Right. I broke the film into five reels. I had five libraries—one for each reel. Then in a separate library I had my assemblies: the editor's cuts, director's cut, all the different assemblies along the way so I could track and go back to versions as needed. We have a pretty robust sound library—so I used SoundMiner for searching. Because I had common sound elements that would be used throughout the film, instead of having them redundant.
in each reel, I had a separate library for audio using Events to organize ambiances, scene-specific effects and temp music. I had a separate library called “Backstage” for any good outtakes. If I find a fun moment, I quickly cut and paste into a working timeline string-out. At the end of production we were able to do a really fun wrap party video very quickly. We also kept a master library with footage organized with an Event for each shoot day. This came in handy from time to time as an alternate way to find footage.

**Hullfish:** I had a similar organization going on *War Room*. Everything was organized by day, but the exact same clips were also organized by scene number, of course. But sometimes, if you thought something might be missing from a scene, you could track down what day it was shot and go back to the day's shooting material to see if you could find it.

**Clayton Condit:** Exactly. And then I had a separate Library for all the extra stuff like second unit b-roll footage. Within each reel, I used a separate Event for each scene. In that Event would be the footage organized by setup and take, along with a string-out of all the takes and scene edits. I rarely edit source/record. I put everything in string-outs, and I just cut and paste and pull selects and everything is gestural editing.

**Hullfish:** Talk to me about the gestural editing—but first, about the string-outs, some editors I've talked to use them as a source. Others edit the string-out like a sculptor uses a block of granite: chipping away at the string-out itself until they have a sequence.

**Clayton Condit:** I'll use both approaches. My string-outs typically stay as my go-to source sorted by setup and take. I put gaps between each setup so I can visually see and quickly navigate to find takes and favorite moments. When watching for the first time I will use a combination of markers for first impressions and cutting favorites and pop them up out of the primary storyline. This keeps all my notes, selects and first impressions in one place so that months later I can come back and easily try alternate edits as the film evolves. To build a scene I will quickly cut and paste best moments and selects into a first assembly with redundant moments, and then I’ll do the chisel approach to craft the scene until it meets its scene objective. I also use your sculptor metaphor approach for montage scenes where you are playing and whittling down to explore options.

**Hullfish:** So you can load a sequence into what would be the Source monitor in Avid? I know there was only one monitor for a while in FCP-X.

**Clayton Condit:** You can have two viewers now but cannot scan a Project (timeline) on the source side. I don’t use the source viewer much, but I can see how it would be nice if you could scan a Project like any other clip without loading it into the timeline. One of my primary complaints about FCP-X is that while you can have multiple timelines open, you don’t have control over how they are organized. You can advance through them with a keystroke or control-click an arrow and see what's open and choose one but it's awkward. I want my tabs back, like FCP7 had, so I can have them in a logical and useful order. Bottom line I typically use a single viewer full screen on a second monitor. That viewer toggles as needed between source and record or multi-cam mode.

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Hullfish: I’m all for a single viewer. That’s the way it basically was in the linear days . . . you’d see your source in it if you were controlling a source deck, and you’d see your program in it if you were watching your edit. So describe this gestural editing.

Clayton Condit: I have to think about that. It’s all muscle memory, right?

Hullfish: Absolutely.

Clayton Condit: I used to work on Avid and Fire or Smoke, and I always used a Wacom tablet. So on Avid and FCP7 I’ve always used the Wacom tablet. For whatever reason, in FCP-X I cannot work with a tablet but have become a big fan of the Magic Trackpad, moving clips around and trimming. Once you learn the magnetic timeline and utilize things like audio roles, it’s just really fast.

Hullfish: I’m envisioning Tom Cruise in Minority Report.

Clayton Condit: That would be cool. My director commented—because we did his first short on FCP7 and his last short and this feature both on FCP-X—“It’s night and day. It’s so fast and you don’t even think about it, we’re moving sections around, we’re reorganizing scenes, and there’s nothing technical in your way.” So clips are like building blocks that you gesturally move around as you build your timeline. You have a primary storyline and can work with individual clips. You can quickly create secondary timelines for video or audio only to keep things together with a single sync point. One complaint I often hear about FCP-X is that when you move stuff, everything’s magnetic and jumps around. And that is true if you are in Select (A) mode. But if you go into Position (P) mode, you are working in an “overwrite” style where everything stays locked in place. Being able to quickly change between these modes and work in a gestural way is very fast.

Hullfish: How is the film going to move through the post-production chain from FCP-X?

Clayton Condit: DaVinci Resolve is at the center of that workflow. We color and on-line with shared media on a SAN and utilize Resolve’s shared working environment. Our VFX team manages shots through a variety of software depending on the need, and everything funnels through Resolve for finish. Our final deliverable for the film is a 2K DCP.

Hullfish: I’m really interested in that process of getting this film from FCP-X to Resolve.

Clayton Condit: It’s all just XML magic. I don’t want to over-simplify it. Cody, my first assistant, and Nick Gumm, my on-line editor, essentially handled all of that, but it’s a pretty clean, straight-forward XML workflow. FCP-X and Resolve work fairly seamlessly now.

Hullfish: I’m really interested in hearing about FCP-X. I’m assuming when you’re not cutting features, you’re cutting TV spots or something up at SPLICE?

Clayton Condit: I am focused on feature work now, but have a fairly diverse background that includes documentary, spots and music videos. We actually did a promotional music video for Voice from the Stone using the end title song with Amy Lee from Evanescence. It was fun to cut a music video again.
Hullfish: The reason why I’m heading down that road is because I’m interested on your take on FCP-X as a feature tool as opposed to a TV spot tool or a music video tool. You can say that “a tool is a tool,” but features really need to be part of a much bigger workflow and be much more collaborative than some other forms of editing. For someone coming at this either as a feature editor on Avid or Premiere or FCP7 or even as an FCP-X editor who’d never done a feature, what do you need to know? Is film editing in FCP-X a unique animal, or do you not even see that there’s a question there?

Clayton Condit: Every tool has its strengths and wish list. Regarding feature films, you really just need to understand the process—how to organize and manage a project and how to turnover to other departments for VFX, color and audio. I particularly enjoy FCP-X. The way you can manipulate the timeline, keyword searches, speed-blade and optical flow, working in 5.1. One specific example on this film where FCP-X saved me was the opening scene where two hands are playing the piano. In production, they recorded the song live and used that recording to do all the takes like shooting a music video. In the end, the cue ended up being twice the speed as they performed it. I had to re-time picture to match, so I used the speed blade for every finger push, and I was able to re-map that entire visual performance to match the final cue. I don’t know another tool that could do that as elegantly.

Hullfish: Wow!

Clayton Condit: And once you’ve speed-bladed it, you can ramp the speed in and out, and this is all subframe accurate so you can get very precise with how it syncs to the audio. I was able to make a seamless sync performance to a completely different performance of the song. But to answer your question—workflow and process matter. You need to go into a film with a defined workflow that works for the entire team. When I do another film, my first choice would be FCP-X today, but if they need me to cut in Avid or otherwise, whatever.

Hullfish: I’m not trying to get you to switch tools. I have no desire to do that. I’m interested in the other side. Convince ME to switch tools! On my last movie, FCP-X was an option and why I didn’t consider it seriously was because of the way I felt a feature needed to be organized and the workflow of getting the film out to the other creative professionals at the end of the process: sound mix, composing, color, DI. While cutting a TV spot, key words or something like that would work great, but that’s not the way you put together a feature.

Clayton Condit: I’ve used other software, and FCP-X is definitely changing the timeline and how you approach a project, but it’s not really that profound. There’s cool stuff like “Replace and Add to Audition.” You can have multiple takes, and if one take is three seconds long and another take is four seconds long, it ripples the timeline for you and changes the duration of the shot while keeping everything in sync. That’s the beauty of the magnetic timeline. Everything’s so fluid, and you just stop thinking tech and are really free to be creative and try things without worrying about timeline management. People think that the audio gets messy because there are no tracks. I think it is actually cleaner and easier to work with. A lot of your
audio is nested in the video of the primary storyline so that makes for a super clean timeline. Individual audio clips can have specific sync points and that becomes a visual cue when editing and moving things around. You can use Audio Roles and collapse what you don’t want to see without worrying about sync. You can create secondary timelines to organize and manipulate sync for a group of clips. I find it very fast and quite frankly a really fresh way to cut.

**Hullfish:** And this third party app was able to take all these “non-track” tracks and deliver something to Skywalker that they were able to put into ProTools and mix a movie.

**Clayton Condit:** For them, it was no different. You export an XML from FCP-X, use X2Pro Audio Convert to create an AAF using your assigned Roles to organize the tracks ProTools will see. I find you have MORE ability to control how it’s organized and turned over. I organize by stems—dialogue, music, ambiances and sound effects. You can organize it however you want, plus you have channel labels so Skywalker can see exactly which microphone is which. Using roles also allows me to kick out temp mixes as isolated stems, which comes in very handy for approvals or sending reference files to the composer so he can easily turn off my temp music separately.

**Hullfish:** And you were cutting with ProRes?

**Clayton Condit:** Yes, 1080 24p ProRes LT.

**Hullfish:** Many people see me as an Avid fan-boy, but I love showcasing the benefits of other tools. In the end, a tool is a tool. Joe Walker said, “If they shot a movie on wet string, I’d cut that.” So it’s great to know that FCP-X can successfully work in the feature film workflow and that there are so many exciting capabilities. Well, this has been a fascinating look into the potential and the strengths of FCP-X and into your own personal creative process. Thank you so much for spending so much time sharing your experience with Art of the Cut.

**Clayton Condit:** Always fun to geek out and share creative ideas. Thank you for facilitating all these great conversations and for including me.

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**Hullfish:** Dan, you started in film, right? What is your experience with NLEs?

**Dan Zimmerman, Maze Runner: The Scorch Trials:** Basically when I started in the business, I started in sound and cut on Moviolas, so I cut on film for many years. I started working with my father in 1995 on The Nutty Professor and basically, that was on Lightworks. Eventually, we graduated from Lightworks to Heavyworks. We did film dailies, print and mag, and we sunk it and then telecined that. Then he would cut digitally from the telecined print and mag. We did that for a lot of years on a lot of shows. Just Married in 2002 was the last one we ever printed film. On Cat in the Hat in 2003, that was our first show on Avid. I had dabbled in Avid as early as 1992 just to see what the program was and be familiar with it, but I wasn’t the editor at the
time, and my dad really liked working with Lightworks. It had a very reminiscent feel of a KEM for him with the controller, the sort of old-style Steenbeck controller-looking thing.

**Hullfish:** I used to have one of those controllers for my Avid back in the early 1990s.

**Dan Zimmerman:** Yeah, they did actually, but he didn’t like it as much. I don’t know why . . . But on *Cat in the Hat* we converted him to Avid and that was that. But literally, I’ve cut on nearly every platform that’s out there right now.

**Hullfish:** Feature film-wise? What movies did you cut and what did you cut them on?

**Dan Zimmerman:** *Cat in the Hat* was Avid, all the way up until my first editing gig in 2005, which was *The Omen*, which was cut on Avid. And then the very next movie I cut was *Alien vs. Predator: Requiem* and that was with the Brothers Strause (directing team), who owned Hydraulics, which was a visual effects company. They were first-time directors, and they wanted to use Final Cut, so I learned Final Cut. For the next three or four shows, I was on Final Cut. Walter Murch had been one of the more prominent proponents of Final Cut. Alan Bell was another one using it at the time, and then me. It seemed to be the three of us trying to be the catalysts for change in the business or at least to promote healthy competition. A little competition lets you realize, “We have to step up to the plate here or we’re gonna get bypassed.” So I never looked down upon good competition because I thought it would accelerate the next great thing.

**Hullfish:** A rising tide that lifts all boats.

**Dan Zimmerman:** I think it really did. To me, Final Cut really helped push Avid into the high definition world. Then, *Season of the Witch* was the last show I did on Final Cut and went back to Avid for a movie with Robert Rodriguez producing called *Predators*. The post was done in Austin with his Troublemaker facility, which was primarily Avid. I cut on Avid from then on until very recently when I learned Premiere. I had come on to a project at FOX for a very short amount of time, and they were cutting on Adobe Premiere, which was my first exposure to that system. When I left, I was offered to help out on an independent movie that is cutting on Premiere, and we are kind of filtering the program through its infancy, in my opinion.

**Hullfish:** I’m also cutting an indie on Premiere right now. I’ve also cut features in Avid and Final Cut. I doubt there are many of us who’ve cut features using all three of those. What do you think of Premiere? How are you feeling about it?

**Dan Zimmerman:** What I don’t think that people grasp when they create these programs—and I think Avid did, which is why I think they’re so successful—is that media sharing and media management is crucial. It is literally almost 100% of the game. So there’s a lot of frustration with it, but I also feel like some of the features—just as an editor—I love it. The active timeline is amazing, the fact that Adobe makes everything so that it’s integrated so well with their other programs like After Effects and Photoshop; there’s so many great values with a company like Adobe coming out with a non-linear editing system that I think can really be competitive. I think the problem though is downstream. We’re not the only ones dealing with
this material. I’ve always used this analogy—editorial is like the hub of a wheel, and we feed all the spokes of the wheel: the music department, the sound department, the composer, visual effects, the DI. Everything comes through us and from us. When you have a system that can’t easily integrate in a media sharing idea, it makes it very difficult. People downstream resist because they’re not used to it, or it’s new or the lists don’t look the same.

**Hullfish:** Fred, were you editing in Avid on *Hateful Eight*?

**Fred Raskin, *The Hateful Eight***: Yes.

**Hullfish:** Alan, what about you on *Hunger Games*? Avid using an ISIS (now re-branded as NEXIS)? Did both movies live on the same system at the same time?

**Alan Bell, *Hunger Games: Mockingjay—Part 2***: Actually, all four movies lived on the edit system at the same time. It wasn’t like we went back to the original *Hunger Games* for much footage, but in *Catching Fire* there was some original footage from *Hunger Games*. We had access to all of the media, and Jennifer could pull it up at any given time. Actually, I may be misrepresenting. I think for the original *Hunger Games* we had the movie, but the dailies were off-line. *Catching Fire* was all there and so was *Mockingjay 1* and *2*. Most of *Catching Fire* might have been off-line as well, but we had it on drives, and at any time I needed something, 20 minutes later it would be there.

**Mark Yoshikawa, *Hunger Games: Mockingjay—Part 2***: That happened a lot because we had to keep referencing things from past films, not just for narrative, but for sound effects and environmental feelings or even score. Or “What does that tablet sound like?” You could go back and grab a temp sound effect or an ADR line. Sometimes Alan would say, “I think Finnick says this or that in *Catching Fire,*” and you could go grab that line temporarily if it was an off-screen thing.

**Hullfish:** So with edit systems in Atlanta, France, Germany and LA, how did you do all that collaboration?

**Alan Bell:** We had an ISIS in Atlanta. The whole cutting room was in Atlanta. When I went to Europe, the cutting room with the ISIS was moved to LA. And because I had a remote trailer system in Atlanta, we had duplicate media. I had a set of drives that were inside an HPZ820. So all of my media was local inside this one box. I was able to bring that to Europe. We also had another box for my assistant with a SAN RAID 5 box with all the same media that I had locally. So that’s how we went to Europe. All that media was encrypted. They would send over digital deliveries of the material every day and that would get copied on to my system, and we’d just make sure everything was up to date.

My big pet peeve about editing systems is that none of them are really set up for people that like to work in a visual way the way I would like to see them. The whole thing where you have to type in metadata and all these systems besides Avid—and I have a lot of criticism about the way Avid handles their bins—there are a lot of features I’d like to see them add that go way beyond searching metadata. Unfortunately, my brain does not work that way. I’m not interested

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in typing in a search string for all the clips of Katniss and then have them propagate in some fashion that's based on timecode and then the minute you add another take it changes everything so that it's no longer the third one down that you're looking for, it's take 83. I'm very visual and I want my tools to support that human nature that I have. Unfortunately, none of the NLEs are doing it the way I think they should. Avid's a little better because they pioneered Frame view. But the fact that all your Frame views have to be the same size, that's just stupid. The fact that you can't make 10 markers on one clip and have the thumbnail be an animated GIF based on those markers? The fact that you can't take all of your clips and fold them down to a group clip that shows that it's 12 clips and hover over it and see “Here are the three you like.” There're so many things that you should be able to do but you can't, and they'd be so easy to implement, it almost makes my head explode. We could do a whole interview just based on how messed up editing systems are when it comes to visual organization.

Hullfish: Any time you want to do that interview, give me a call! That would be fascinating. I'd love that. And then we get an Avid person and a Premiere person and an FCP-X person on the line at the same time . . . that would be a fascinating big roundtable discussion.

Alan Bell: It probably would. I can certainly pontificate. Mark can attest to that.

Hullfish: Jake, was Brooklyn on Avid? With an ISIS? What was the editing team like?

Jake Roberts, Brooklyn: Yes, Avid on an ISIS. Over the course of the production, I had three assistants due to all the moving around but only ever one at a time. Once in London we just had two stations on it and were cutting in a facilities house called Molinare, where we were also doing our grading. What was fabulous about it was that they would allow us to project the movie in their huge grading theater on a weekly basis. It made so much difference because when you see the film with scale, the rhythms of the film, the places you make the cut, are quite different.

Hullfish: Joe, you're on Avid, I'm assuming?

Joe Walker, Sicario: My route was film first. 16mm. 35mm. And then I learned three-machine Beta SP editing. I did a long apprenticeship at the BBC, it felt like forever, and I just got fed up because I thought nobody's going to let me touch their drama. So I went into arts documentary to get experience and was an early adopter of non-linear: initially Lightworks. That put me ahead of the curve a little bit and helped me get my first drama work on a cop show, then a comedy, then I left and went freelance. I flipped over to Avid quite soon after that. I'd cut a feature film on Heavyworks, and it was a nightmare. At the time everything felt very primitive compared to Avid. I still have a number of things on my Avid keyboard settings that are sort of adapted Lightworks. Skipping to the next cut, I use my forward and backward arrow keys. I tab through the cut.

Hullfish: That's exactly my method. Though I use the tab and shift-tab buttons to jump between cuts.
Joe Walker: That’s a Lightworks remnant. The other thing I do is control—using audio keyframes—all of the ins and outs on every single piece of sound: faded in, faded out and checkerboarded.

Hullfish: The movie I’m cutting now is in Premiere.

Joe Walker: Oh, we’ll have to talk about that. I’m very curious about Premiere. Do you think it’s worth me having a look at it?

Hullfish: Certainly worth having a look at. I’m having a bit of a slog with it. But Adobe has improved it immensely in just the last year or two. Some of the problems I have with Premiere are simply a matter of being a relative newbie. But some of it isn’t. I think they’ll get it fixed, but for now, I prefer Avid. I’ve been on Avid since 1992.

Joe Walker: God, that’s a long time.

Hullfish: I know. Thanks for making me feel old . . . Trimming, I think is better on Avid, but I think something you’d like on Premiere is that you can slide the audio up and down in real time while a track is playing right in the timeline. That’s beautiful. Avid really needs to work on their audio. That they own ProTools and have such limited audio in Media Composer is kind of criminal. But for many movies, Avid is the only thing that can pull them off, mostly because of the collaboration that a major Hollywood feature requires.

Joe Walker: On Blackhat we had something like 16 editors working on ISIS, and Avid’s strength is being completely rock solid with that kind of multiple access. We had corridors full of editors and assistants tapping into the same reels.

Hullfish: In my interviews on The Martian, Scalia and Potter said that the ISIS and the collaborative workflows that are possible because of it were the only way that that film could have been made on the deadline they were working on.

Some colleagues and I were discussing Murch and his refusal to edit on Avid (a thread on the Avid-L2). And one of the reasons he states—among others—is that Avid only has 24 audio tracks. And some people said, “Well, it’s crazy to need more than 24 tracks of audio.” But if you’ve ever cut a film and had your own production and sound and music tracks, and then needed to incorporate the return tracks that the sound department gives back with dialogue edits and sound effects and atmospheres and music stems, then you understand how incredibly limiting 24 tracks is to a feature film production. (Since this interview, Avid now has 64 tracks—or “voices”—of audio. 64 mono tracks or 32 stereo tracks or about 10 5.1 surround tracks or any combination, that adds up to 64.)

Joe Walker: You need a crazy amount of tracks nowadays. I find that I’m getting frustrated with the sound tools in Avid. The effects sliders, sometimes, the difference between 10% wet and 11% wet is too tiny to change. And the three little sliders at the bottom of color correction . . . I just end up entering random numbers in there and pressing return.
Hullfish: Cheryl, *The Martian* was a big project, with a team as large as you’ve described, the Avid’s had to have had shared storage. Can you imagine cutting this movie without ISIS?

Cheryl Potter, *The Martian*: No. No, I can’t. We could not have cut this movie without being able to all have access to the same material at the same time, just there’s not a way we could have pulled it off. We had one ISIS here in London while we were in France (Ridley’s home base). So the main cutting room—Ridley, Pietro and myself; Laurence (the first assistant), Paolo (the second assistant), our VFX editor Richard Ketteridge, and his assistant Henry Kemplen, we were all in France. And then we also had Zoe and Elise here in London with the visual effects guys, so we had to maintain the media and the project across two countries. Every day we were updating media from one to the other. The visual effects would come in in London, so we’d need to make sure that the visual effects media made it to France and vice versa. Any new titles or renders and of course the cut as well, that was being created in France, that media needed to get back to London, and that London at least had a new project bin every morning. So they were never more than a day behind.

Hullfish: Did you have another ISIS in France, or were you just using a RAID or what?

Cheryl Potter: There was another ISIS in France because we still had Pietro, myself, Laurence Johnson, Paolo Buzzetti and our visual effects editor, Richard Ketteridge, and the visual effects assistant, Henry Kemplen. So that’s six Avids?

Hullfish: Have you cut in any other NLEs? Do you feel that Avid is the choice for a project this complex because of the media management?

Cheryl Potter: Yes. It’s that simple really: it’s the media management. It’s being able to keep track of metadata. It just doesn’t seem like the other systems have the capability to be the library that the Avid needs to be to be on a show of this size, with all the amount of stuff we’ve got going on. You’re tracking so many shots, not only do you have 1700 visual effects shots, but every single one of those shots you’ve received multiple submissions for, and you need to make sure that you’ve got the latest version or that you can go back to the previous version. It’s so much information, and I don’t think they’ve managed to crack that with any other system yet, though I must admit I haven’t used the other systems much. I keep saying I’ll learn Premiere and I’ll learn Final Cut when I have a job that puts me on them, because if I try to learn it before that, I’ll just forget, because unless you’re using it every day, it’s not going to stick. But that hasn’t happened. It’s nearly happened twice, there were two jobs that looked like I was going to learn Final Cut, and then both of them went Avid at the last minute.

Hullfish: Pietro, anything to add to Cheryl’s discussion of *The Martian*?

Pietro Scalia, *The Martian*: We had 10 Avids all connected to ISIS (Avid’s shared storage). Besides the RED cameras, we also shot with GoPro cameras. All of that was ingested into the ISIS. We had probably 300 hours’ worth of film between the REDs and GoPros. We had about
32 Terabytes of off-line quality Avid media and almost 200 terabytes of RAW files from the 3D RED Dragon cameras shooting 6K.

**Hullfish:** Did you cut in 3D?

**Pietro Scalia:** Yes, of course. We have 3D capabilities in the Avid. I had done that on Prometheus, which was my first 3D movie. We screen our movies in the cutting room every evening in 3D on a nice screen. Then I edit in 2D, but when I play back the scene for myself to review or for Ridley, we watch it in 3D.

**Hullfish:** That’s a lot of re-arranging and restructuring and trimming. Does Avid help you do that? Have you tried other NLEs?

**Pietro Scalia:** I’m very comfortable with Avid. I wish I was technically more prolific and use all of the bells and whistles that it has, but for me what is fundamental is the organizational structure of the material and how I ask my assistants to bring in the material and how we keep track of that. It starts with the folders and bins: dailies, stock footage, music, VFX, library—everything is in there, and we carry this system from one movie to the next. It’s also very important to keep track of the history of my cuts. I know what I did in this cut or that cut, simply by the naming of the cut. It’s a gradual evolution and progression of cuts. The hierarchy of the way it works is that I work in one cut, and if I need assistants to work on it, they can take the cut, do sound work, do visual effects work, comp it and then it comes back to me and it gets reviewed with me and Ridley and we put it back in the reel. The organizational part of the Avid is what’s very useful and obviously, the tools, the simple visual effects, and comps that we can do . . . it’s a very versatile tool.

**Hullfish:** Eddie, what are the things in Avid that you like? Have you tried other NLEs?

**Eddie Hamilton, Mission Impossible: Rogue Nation:** I have used Avid and I have used Final Cut 7. I did two movies on Final Cut 7. I got used to it. And I liked the subframe audio keyframes, which they still don’t have on Avid. But there are several things I really like on Avid. I’m not sure about Premiere, but the thing that was certainly a problem in Final Cut was not being able to move projects from one computer to another. The way that the Avid media is structured, if you don’t use AMA links, which I never do because that way lies madness. I always transcode anything that comes in so it’s transcoded to an Avid codec and stored in the Avid MXF folder structure. If you have an external drive with the media on it, and the project, you can plug that into any other Avid on the planet and everything will pop up and nothing will be off-line, whereas with Final Cut, because you’re dragging files from anywhere, you try and move to another system, and you’ll find that half of the media is off-line. And so that was always a massive headache. The other thing was that everything was stored in one file (in Final Cut 7). The entire project was in one file, so if it got corrupted you would lose EVERYTHING. Whereas with Avid, every bin is a separate file. When you’re working on a gigantic project, the file sizes start to become enormously cumbersome on Final Cut. The only other thing is collaboration. The way that Avid allows multiple people to collaborate on one project (with ISIS) has been bulletproof for years and continues to be the market leader.

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when you have a lot of people who are on the same media and need access to the same bins, and it allows only certain users to right to bins and locks everyone else out and then the way the ISIS connects to CAT-5 or CAT-6 cables allows everybody to read everything, including a laptop, if you want to. I haven’t used Premiere for years, so all of the massive advances that Premiere has taken since then I can’t comment on.

Hullfish: You were talking about being meticulous, and that isn’t just about organizing but about cutting I’m sure, and a frame matters. So what about trimming tools?

Eddie Hamilton: The trimming tools in Avid are phenomenal. I have no problem keeping stuff in sync. I tend to lasso my trims, which is pretty nerdy, but if you drag a window around all the tracks where you want to trim, which can be kind of higgledy-piggledy—not necessarily in a vertical line down the timeline—then Avid can make a complex trim with many tracks very straight-forward. There are so many keyboard shortcuts to trimming, which I use all the time. If you want to slip a shot, you don’t even go into trim mode. You park on it, select the track to slip and press the slip keys at the bottom of the keyboard. It makes you look like a wizard because suddenly the music edit is fixed or you’ve just adjusted a shot by 8 frames at the touch of a button. The only thing I wish Avid would do is remove the SmartTools or have the option to remove them because they take up a lot of space on the left of the timeline. But that’s a super nerdy request which I’m sure they will address at some point.

Hullfish: Sidney, are you looking to become proficient on any other NLEs? I know dramatic television series work is almost 100% cut on Avid.

Sidney Wolinsky, House of Cards: I cut House of Cards on Final Cut Pro.

Hullfish: That’s right because that’s a Fincher project and he’s a Final Cut guy.

Sidney Wolinsky: Right, so that was a condition of employment. That was the second time. I did another series a few years before on Final Cut. I’m not a big fan but you learn the tools. The most important thing is knowing what to do. You figure out how to do it with the tools you have. I hear people are starting to use Adobe Premiere. I heard they cut Gone Girl on that.

Hullfish: I think that is true.

Sidney Wolinsky: And when I was at House of Cards, Kurt Baxter was cutting a Calvin Klein ad on Premiere, and Adobe literally had all their engineers in another room doing stuff, working on the program.

Hullfish: To make sure that it went well.

Sidney Wolinsky: For obvious reasons. So maybe Adobe Premiere will be the next big thing. But I’ve cut on Avid for many years, and I like it very much. I could complain. People complain about Avid a lot and I have over the years, but ultimately I find that it’s the most sophisticated program I’ve worked with.

Hullfish: What complaints do you have? What’s your number one issue with Avid right now? © 2017 Taylor & Francis
Sidney Wolinsky: I can’t think of any specific issue. There are a couple of little bugs that have never been fixed, but apart from that, it’s been incredibly stable. I was cutting on 7—the highest point release of 7—and it might crash once a week, if that much. Final Cut crashed hourly. So, compared to the old days with Avid, it’s incredibly stable. I don’t understand all of the assistant stuff that much, so I can’t speak to the really highly technical stuff, but in terms of the editing tools and the ability to do editing stuff, I’m very happy with it.

Hullfish: And how long have you been cutting on Avid?


Hullfish: Same with me.

Sidney Wolinsky: They did not have the 24 frame software at the time.

Hullfish: Was that transition to Avid a transition you were happy to make? Looking back on it, from cutting film to cutting on Avid is a huge improvement, or do you miss it?

Sidney Wolinsky: The hardest thing for me was cutting electronically period. The first system I worked on was Montage. Then I actually started cutting on Avid because I was doing a movie of the week, and I couldn’t find a Montage in Hollywood to rent, and a friend of mine, Steve Cohen, suggested it, and I found one place that would rent Avids, and the producer discovered that it wasn’t any more expensive than a Montage so he agreed to it, and frankly it was so far advanced from the Montage that I could play a whole act of a movie of the week without stopping. I thought, “Well, this is it.” Montage was based on seventeen Beta decks cueing up and going with computerized control, so you’d have to tell it to play from in to out and often it would say, “Can only play two and a half minutes or will have to substitute 75 pieces of black.” With the Avid I could literally play an entire 10-minute act of a movie of the week without stopping. Then I’d have to change all the drives and put in a new set of drives, but nevertheless, it was a major improvement. Since then, I’ve cut just about everything on Avid. I’ve never cut on film again.

Hullfish: Fabienne, what edit system are you using?

Fabienne Bouville, American Horror Story: In my experience the industry standard for television editing is Avid. On American Horror Story we worked on Final Cut 7, but when FCP-X came out the post team freaked out and we switched to Avid, along with the rest of the industry. Ryan Murphy was also the showrunner for Glee which was also FCP, until the switch to Avid.

I still miss Final Cut Pro in some ways. It felt more streamlined to me, and faster to navigate. I really miss unlimited soundtracks and how it handled sound. And I’m very frustrated with the trim tool in Avid. How you have to go fishing for an edit on every track before you can even begin to trim anything. I’ll be clicking away on every track and then, the ultimate insult, the whole thing comes undone because I clicked a millimeter off course. Ugh!

Hullfish: Most Avid editors would say that trimming is one of Avid’s strengths.
Fabienne Bouville: Not in my mind. To be fair, part of my frustration is that on American Horror Story we’re cutting on MC 5.5, which is very old (the current release is version 8). Keeping sync is fussy and then we also don’t have nearly enough audio tracks. FCP has 99 tracks. In Avid 5.5, there are only 16 voices. I just find it very frustrating to constantly have to mix down audio in order to fit into those constraints, and then the more tracks I have, the more cumbersome it is to use the trim tool, which is my bread and butter.

Hullfish: Mark, for Gravity were you working on two or more separate systems on an ISIS?

Mark Sanger, Gravity: We were on seven systems running from a standard Unity system.

Hullfish: Were there any Avid features that you were glad you had access to? What features in Avid do you regularly count on? Were there any things in Avid you had to work around?

Mark Sanger: During the blocking process we heavily utilized the effects tools to play with ideas and concepts. I was constantly moving characters and objects around, slipping dialogue and re-timing animation in order to give a blueprint of Alfonso’s latest concepts to the VFX guys. However, once we got to the shoot, it became more like a conventional editing process assessing performances, which is where the shape of the film really evolved.

Hullfish: Did you edit using stereoscopic tools in Avid? Were you always editing with “3D” on? Or did you often edit in 2D?

Mark Sanger: I discussed with Alfonso early on that we would cut the film in 2D. For me, the 2D version needed to work completely before we did any post-conversion. He was in agreement that we needed the film to work as a 2D foundation before we elevated the experience with either 3D or Dolby Atmos.

Hullfish: Did you seriously consider any other editing system? What were your decision-making points in deciding on Avid over FCP, FCP-X, Premiere or Lightworks?

Mark Sanger: Nope, on such a huge project Avid was the only choice for us. It’s not that I don’t necessarily trust any of the other systems. It’s simply that when you are presented with such an awesome task as ‘Gravity’, it is much more logical to stick with a known, tried-and-tested system. Neither Avid nor our supplier Hireworks, ever let us down once in the entire three years so our thinking was justified.

Hullfish: Billy, did you start out cutting film originally?

Bill Fox, Straight Outta Compton: No. I have never cut film. I came from an electronic background. I originally worked at a television station in San Diego, then I came up to Los Angeles, working at NBC/Burbank, New York, and then different edit facilities on-lining and off-lining.

Hullfish: That’s exactly how I came up. The interesting thing to me is—with the expansion of non-linear editing—I assume you’re on Avid?

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Bill Fox: I had been cutting Avid, then I peeled off and cut on Final Cut for about eight years and then, just recently, went back to Avid because things are in such an upside-down state. Avid is a good old truck and it gets the job done, but it is so far behind FCP-X and Premiere. Even Final Cut Pro 7 . . . I think those are great systems.

Hullfish: I co-edited my first feature, Courageous, in FCP7, that was in 2010. Then War Room from last year, we cut in Avid. Now I’m cutting an indie feature in Premiere. It’s working, but I haven’t gone out to DI with that yet, though that’s soon.

Bill Fox: Premiere is cool. Actually, my wife works for Adobe, so she’s constantly asking, “Why aren’t you on Premiere?” I just don’t have a reason why I should switch. I have to have a reason. If I go to a studio or a director, I have to tell them, “This is the reason why it would be better for the movie to go to this NLE . . . this would be the advantage.” So she hooked me up with the product manager, and he came to my edit room while I was on Straight Outta Compton, and we sat for two hours and never turned on the system. It was just talk. And to make a long story short, I came away with five or six really powerful features that I could sell. Probably the biggest for me was sub-mixes in Premiere. Because I edit with my dialogue, effects and music, and I run tons of tracks. But to be able to have a sub-mix of my entire effects track or a sub-mix of all the dialogue tracks or music? That is HUGE. And no one else does that.

Hullfish: I was going to ask about that since you said you were on Avid and sound was so important to you. One of the biggest complaints I’ve heard from multiple editors that I’ve interviewed for Art of the Cut is that there aren’t enough audio tracks in Avid. How do you feel about Avid’s audio capabilities?

Bill Fox: Yes, the lack of adding tracks is frustrating, but it’s also horrible that you have to designate a track as either stereo or mono. It drives me crazy that you can only throw one filter onto a given audio track. You can add EQ in the filter, but if you want to add three different filters, you have to mix it down. Avid owns ProTools! Really? The number of tracks drives me crazy. I’m normally running tracks, and that’s a compromise because it’s an Avid thing. Four dialogue at the top, four music at the bottom, then all these effects in the middle.

Hullfish: That’s exactly how I do it.

Bill Fox: I need more tracks. And I have to designate four of them to be stereo and four to be mono. Well, what happens if I have more stereo? I’m always playing this game of changing effects from stereo to mono to make it work. Really not acceptable.

Hullfish: I’ve heard people say, “Needing more than 24 track is crazy! Why do you need that many?” But the 16 tracks that you have is all the tracks you’re using as the picture editor, but then you start receiving mixed tracks from the sound editors and the music editors, and you have to put those stems on their own separate tracks so you still have the original production.
or temp tracks available. And that’s not counting presence or surround ambiance or any of that. So you can easily get well over 24 stereo tracks, and that’s being economical with it.

Bill Fox: That’s where, in FCP7, I was normally running 24 tracks. Mono or stereo didn’t matter. Then when we would get further into post and we would get temp dubs stems—and as you said, the composer would be sending us music alts and sometimes they were six tracks wide, I would push out to 36 or 40 tracks. It was no problem at all. The other thing about Avid that drives me crazy is how user-hostile it is with surround sound. They’ve included it to a degree, but it’s your typical Avid way of Scotch-taping it in. It’s there kind of, but it’s pretty kludgy. It’s actually so awkward on Straight Outta Compton I didn’t really need surround, but I did want to be in “left-center-right” with dialogue in the middle. It just fought me so much that I bailed on it. I went back to an LT-RT. I do run it so that if I run a preview right out of the system I do it so that I have a center track. My dialogue is always in my first four tracks. It works but . . .

Hullfish: Before we get into the art of the editing, which I really want to get to, you mentioned that there were about five things in Premiere that you really liked, that you could sell. You mentioned sub-mixes. What else?

Bill Fox: One of them is—in FCP7—I really loved the concept of Final Cut Studio with a suite of apps for sound, effects and color. In Premiere, they have Dynamic Linking.

Hullfish: Yup.

Bill Fox: I haven’t used it, but I love that concept of bouncing stuff back and forth between apps without a lot of exports is potentially very powerful, if they do it the way I’d like it. My issue with that linking is that I still need the original in the timeline somewhere so when we do the real “optical” (VFX hand-off) we can hand it off properly. So I love that concept of quickly doing more complicated visual effects in After Effects. I came from—in my on-line days—doing visual effects.

Hullfish: So sub-mixes and Dynamic Linking.

Bill Fox: Color correction is infinitely more powerful than Avid’s. Actually, the color correction in FCP-X is excellent also. I love color correction. I really enjoyed Color when Apple incorporated that. I even have a Euphonix color board sitting right in front of me. Unfortunately, there’s only so much time in the day.

Hullfish: To get back: sub-mixes, Dynamic Linking, color . . .

Bill Fox: It’s a little thing but it’s a big thing and FCP-X does it superbly and Avid doesn’t do it at all, and this is the biggest thing that drives me crazy: on an Avid when you hit play, you’re locked out. You can’t scroll, you can’t do anything. In FCP7 you can. You can go over and look at your files, scroll the timeline, you can do almost anything. In FCP-X, I did this by accident, I was watching a scene I had cut in FCP-X and a piece of music that I had cut in had volumed out, but the tail was hanging WAY out, so I was just watching the timeline, and I reached over
and grabbed the tail and I just scooted it over—trimmed the tail—and the timeline never stopped. It kept playing. Then I started—in real time—moving titles around while the timeline played. This is fantastic.

Hullfish: Premiere is pretty much the same way.

Bill Fox: I figure I lose a little less than a day a week with an Avid. About an hour a day.

Hullfish: Maryann, for Star Wars you editing on Avid, I’m assuming? Collaboratively? Tell me a little about the setup and the team.

Maryann Brandon, Star Wars: The Force Awakens: We’re on a shared ISIS system and all of us are on an Avid. They set up the dailies for us and organize it the way we like it. We do use ScriptSync. It’s a big, valuable tool for us, especially in heavy dialogue scenes with lots of cameras.

Hullfish: Margaret, I’m assuming you were editing in Avid. Have you tried other NLEs? What do you like and dislike about Avid?

Margaret Sixel, Mad Max: Fury Road: Since I have been editing on and off for about 30 years, I have tried most systems. I cut on film for a long time and have lived through the transition to digital. On Happy Feet we used FCP, but we switched to Avid for Fury Road. It was rock solid.

Hullfish: Martin, you’re cutting in Avid, I assume?


Hullfish: I’m assuming you cut on film at the beginning of your career. You go back to the mid-80s, which pre-dates Avid.

Martin Walsh: Yes, but I switched really early actually. I went to Australia to do a movie, and they were ahead of us Brits, anyway. They’d adopted Avid two or three years ahead of us because their industry’s so tiny. And I went down there, and the Australian assistant I had down there showed me a bunch of shortcuts and little things on the keyboard that I still do today. I still use exactly that same stuff that I learned whenever that was . . . 15 years ago?

Hullfish: I bet it was long before that.

Martin Walsh: Probably.

Hullfish: I’ve been on Avid since 1992.

Martin Walsh: Is it really that long? Wow. That’s incredible . . . might have been something like ’88.

Hullfish: 1988 was the first year Avid was introduced at NAB. So the early 90s might have been when you got on.

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Martin Walsh: It must have been about then. A movie called Welcome to Woop Woop.

Hullfish: That was released in 1997 according to IMDB. So you were probably cutting that in 1996. So we’ve both been on Avid about 20-25 years. What NLE did you use, Mark? Avid, I’m assuming?

Mark Livolsi, The Jungle Book: Yes.

Hullfish: Have you always cut on Avid or have you tried other NLE’s?

Mark Livolsi: I have always cut on Avid. At this point in my career, I can run my fingers over a keyboard and cut without thinking about the buttons, and anything that stops the process of creating or slowing my edit is just frustrating.

Hullfish: How long have you been on Avid? Do you remember your first Avid gig?

Mark Livolsi: When I was an assistant my first Avid gig was a film called Touch, edited by Cara Silverman. My first Avid gig as an editor was an independent film called Spin the Bottle, never released.

Hullfish: Andrew, I’m assuming that you cut on Avid?

Andrew Weisblum, Alice Through the Looking Glass: I did, yes.

Hullfish: What do you like and not like about editing on Avid? Have you used any other NLEs?

Andrew Weisblum: Well, back in my youth, I was a Lightworks assistant and cut on Lightworks for a while and before that film. And I don’t miss either. I happen to know a lot technically from my assistant days. I’ve done a lot as a visual effects editor and done visual effects shots for a lot of movies and spent a lot of time learning technology. At a certain point I decided, if it doesn’t make it easier or more efficient for me at this point, I’m not interested. If it doesn’t help me make the movie better, then I don’t really care. As such, I’m very happy with how Avid works because it’s a standardized thing. For decades people cut on film and never talked about technical anything. And I don’t think the movies are better or worse because people are cutting them on Avid versus cutting on film. It’s when you become accustomed to the tool and know how to use it that you can move on to thinking creatively. That being said, I do a lot of visual temps to try and communicate an idea for certain things when I’m on a movie, and I’ll do that in generally in After Effects. If anything I wish there was easier integration for Avid in After Effects like in Premiere.

Hullfish: Anne, I’m pretty sure Lawrence of Arabia wasn’t cut on Avid. What were some of the challenges when you went from editing on film to editing digitally?

Anne Coates, Lawrence of Arabia: I’m not very technical, so it was quite difficult for me to learn. I’d never worked on a computer before. My assistants got me playing games: Naughts and Crosses (Tic Tac Toe) and Crosswords and things like that to try and get me OK with the mouse. I mean, I thought a mouse was something that ran across the floor. (Laughs), because

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I’d never done anything like that. So it was a big change for somebody like me. Somehow, when you’re cutting with film you are so close to it. I used to love my Moviola, particularly rather than the Steenbecks and things I worked on because I could be just with me looking down and nobody can see over your shoulder. I liked that personal way of cutting, but when you’re on an Avid or something these days, you’re sitting back and your screens out here (she reaches her hands far out in front of her), and it has a rather impersonal feel that I didn’t like a lot. And you kind of cut from the outside in, because you have the material up there and you kind of cut it down. With a Moviola you kind of cut from inside out. You cut the other way round. But once I got into realizing that what you’re doing is really exactly the same, because you’re telling a story. You were making it exciting. You were saving the actors’ performances as I said to George Clooney. He thought that was very funny. We’ve been friends ever since. (Laughs)

Hullfish: Were there things about switching to computerized editing that you actually liked?

Anne Coates: Nobody’s asked me that before. I suppose it’s the speed at which you can see alterations. But I always had my film cut to camera at the end of shooting, so I was fast anyway, but the speed. I really loved film, when you used to hold it up and look at the little squares. When they were conforming the film—my assistants would conform the film—and I would go into the rooms where they were working and take the film and look at it, feel it. The celluloid. I would never go back to film again, but I did love cutting on film. I didn’t have it scattered all over the place, but sometimes I did have a bit hanging around my neck.

Hullfish: When you cut on Avid you said you cut from the outside in, but when you cut on film you were cutting from the inside out. Can you explain what you mean by that?

Anne Coates: No.

Hullfish: No. (Laughs)

Anne Coates: It’s just something I feel. For me, it explains why I was able to accept digital because I worked that out for myself. It’s the same thing. I’m telling a story. 90% of what editors do is just tell the story. Write the script. That’s all I was doing, just in a different way. So I don’t know how different one would compare cuts. I don’t think that the films I’ve done digitally are any different than the films before. Congo was the first film I did on digital, and it was very difficult. It was a difficult film because it had a lot of special effects and things, which is why it needed to be on digital actually. They told me, “You’ll have to learn digital if you want to do the film.” And they had me taught and my crew taught, so we all learned together. It was quite a mess, to begin with. I did two or three films on . . . what was it called?

Hullfish: Lightworks?

Anne Coates: Lightworks. Yes. I did the first couple of films on Lightworks because they were similar to film because they had a little lever thing and also they were English. So I learned
that, but then when I went on to Out of Sight and Steven Soderbergh wanted me to work on Avid because his sound man could connect with Avid, but he couldn’t on Lightworks. I didn’t want to move to Avid, because I thought, “I’ve learned Lightworks, and that’s that.” But I had to learn all over again.

**Hullfish:** Did Lightworks feel better to you than Avid?

**Anne Coates:** Well now Avid does, but since I learned Lightworks, I wanted to stay with Lightworks. To this day I don’t think I do things the right way always on Avid, but I’m very fast, and I get the results I want. If I get stuck with it, I get an assistant to come and get me unstuck, because I’m not technical. In the old days when the Moviola went wrong, I could get in the back and do things, but I can’t digitally. I could handle it pretty well, but I had an assistant working with me for a time that was really upset that I was doing things the wrong way in Avid. He was always trying to correct me, and I said, “John. I like doing it this way. It may not be right, but I seem to be getting results faster than you and I’m doing it the wrong way.”

**Hullfish:** (Laughs)

**Anne Coates:** I think now I still do things the wrong way, but I get the results and I get the speed and I get what I want. I can’t do complex opticals, but I’m pretty good at doing standard opticals, but if it’s very complicated I get an assistant to help me because you can do such amazing things in different layers.

**Hullfish:** Kelley? NLE preference? Thoughts about what you like and dislike about Avid and the other choices? I see you assisted on Lightworks.

**Kelley Dixon,** *Breaking Bad:* I don’t really have experience with other systems other than Avid — editing-wise. I did start out assisting on Lightworks back in the day. I also spent a year doing tech support for them. It was a good system. It just couldn’t keep up with the R&D. And (hope I’m getting this correct) it seemed that Avid had the advantage of the Mac platform, and Lightworks was working on DOS and not through Microsoft Windows. I dunno . . . Eventually, Avid just became the frontrunner, and I had to learn it. I was always really good with computers, though. But I did learn a ton working on and for Lightworks. How to look under the hood and not be afraid. How to build computers. I still am a Windows user. I Bootcamp it on a MacBook Pro. I definitely dig the MacBook hardware.

I was never an FCP user. Just really never had to work with it. And I was working so much that I didn’t have time to learn another system on the side.

What I’ve heard . . . is that for editing . . . they’re all fairly similar. Learning the buttons to push to cut, move, trim, etc. is pretty intuitive. It’s the assistant work that’s much more intensive. Organizing, searching, importing and exporting, management, etc. is a lot more system-centric.

I’ve also heard that FCP pales in comparison to Avid in regard to the Trim Functions. Which I use extensively. So that wouldn’t psych me up. FCP had a little stint of popularity a few years ago. But I guess some new version came out that everyone hated so it seems to have gone away.
Again, this is just the rumor I hear in the ether; but when you hear about some big editor on some big feature advertising that the whole thing was cut on whatever edit system (that’s not Avid), everybody has heard that the editor is getting endorsement money, and there was a team of troubleshooters from said system there to fix all the problems. I’ve been happy with Avid. And there’s a ton of features that I’ve probably never tapped into.

Although there is one thing I’m mad at. In some update a few years ago, the ability to stop on the exact frame you hit STOP on, stopped working. Now, you hit STOP or PAUSE, and the system stops three frames later. It used to “stop on a dime.” Very annoying.

**Hullfish:** Conrad, when did you switch from film editing to non-linear editing, digital?

**Conrad Buff,** *The Huntsman: Winter’s War*: Over the whole course of my early career, there were various attempts at electronic editing that came along. The CMX, the Editdroid . . .

**Hullfish:** . . . Montage . . . Lightworks . . .

**Conrad Buff:** Sure, Lightworks, Montage, yeah, but even before Lightworks, Montage, all of those things. And then, finally Avid came along, but it was only in the commercial world. I had friends that used it, and I thought, “You know, I’ve been waiting for years. I figured something was going to take over, and I was always worried that somehow that electronic world, that I would be—in terms of union—I thought, it might be a separate union that took over that world and that I would be excluded somehow from the opportunity to utilize that kind of technology. But I figured that day would come. But there were never any systems that I liked that worked, except Avid. I took a class in Avid, for about a week, at USC, just on my own, for my own edification, never having thought I would apply it to anything. Lo and behold, Roger Donaldson was doing a film, *The Getaway*, a remake of *The Getaway*. The studio said, “Hey, we have a compressed post schedule, we would like you to use the Montage.” I said, “No, way! We’ll either get two editors and we’ll do it on film, or let me try the Avid.” At that point, this was about ‘92, ‘93, something like that . . .

**Hullfish:** That’s exactly when I started on Avid.

**Conrad Buff:** There you go! The director loved the idea. The studio was very hesitant. And I said, “Look, it’ll work! It’ll work! It’ll work!” We were using optical drives. I couldn’t even play the whole car chase back for Roger (Laughs). I could play half of it, but he was wonderfully accommodating and embraced the technology. Anyway, it worked. I found an assistant, Joel Negron, who is now a full-fledged editor, because he had some electronic and digital experience. Between my normal assistant, who was very film savvy, and Joel and myself, and Roger’s sympathetic attitude, we did *The Getaway* all on Avid. I thought, “Well, that will be the last time that I ever use it.” But then, Jim Cameron called and said, “I’m gonna do this movie, *True Lies.*” And I said, “Well, I gotta turn you on to Avid.” He was very hesitant, and then embraced it. Once that went off, it just kept going and we never did film again.

**Hullfish:** ‘92, the first Avid system that I started working on was purchased for *The Fugitive*, which was shot here in Chicago.

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Conrad Buff: Those days it was a little scary.

Hullfish: Yeah, not much to look at.

Conrad Buff: For a big scale movie, how do you manage all of that media? By the time they got to True Lies, we had those shoeboxes . . . I forgot how many . . . how much storage they had that you could play. You couldn't play an entire reel at that time, as I recall.

Hullfish: They were five Gigs or some crazy number! Eight, I think eight Gigs and you bought five of them to get 40 Gigs! Now, you've got a thumb drive that has quadruple that. Job, you and I are both Avid guys and have known each other for a long time, what do you like and hate about Avid? Why do you use it? You could be editing on Premiere, if you wanted to.

Job Ter Burg, Elle: Yeah, I'm not against it. I just don't have experience with it. There is something about the way you structure projects in Avid and the way you can control your footage that I really like. I must say that my first encounter with an NLE when I was still in film school was with a Lightworks system. I preferred that interface to Avid's. But the main thing about Avid Media Composer is that, however clumsy some of the workflows may be, it will work. Especially on films with tight schedules (like nearly all of them these days). I've just finished a film called Brimstone, starring Guy Pearce and Dakota Fanning. That film had a schedule that required us to start working on music and ADR in an early stage when we were still quite far from a locked picture cut. We knew we were going to be cutting all the way up until we were in final mix. So we needed a lot of flexibility going back and forth between sound editorial and picture editorial, and sending AAF's to sound editorial is simple and robust. I've seen many projects using other software where these turnovers to sound were a nightmare.

That said, I don’t think any of these tools are perfect. Pro Tools is great for a lot of things and horrible in many, many other ways, and I don’t think that the collaboration between Media Composer and Pro Tools is anywhere near perfect. But at least, I will know that if I send something to someone today, they will be able to open that and work on it today. And that’s just something that other solutions haven’t proven to do for me.

Hullfish: David, are you on Avid? Have you tried Premiere or any of the other systems?

David Wu, Hardboiled: I’ve always been on Avid, and I recommend Avid. Before that, I tried a couple of years on Lightworks. The Avid technician said, “Every time I walk into a room with Lightworks, the editor’s always crawling under the table with his butt up in the air, fixing the machine.” I know Final Cut Pro. I might spend some time getting to know Premiere. Walter Murch said he liked to cut sometimes on Avid, sometimes on Premiere. Like he could jump into a Porsche or a Ferrari, and he knows how to handle both or a Lamborghini. I think that sometimes it gives you some innovation or inspiration by switching to other tools. I’m very old-school. I stick with a brand . . . I’m not a brand worshipper, but I stick with things, like a favorite dish. Avid is my favorite toy, and I just stick with it for all these years. Just like my better half. We’ve been married 36 years . . . no, more, 37 or 38. I tried Final Cut Pro, but
I realized that I just want my wife back. I write all my own scripts, too. People ask me whether I like editing or directing or writing better. I think this is like having three girlfriends. When I’m sitting in the editing room for quite a long while, I’d like to go on the set and direct, just like I want to be with the other girlfriend. But when I’m on the set, I’m waiting for the lighting and the sun and the rain, and I’m frustrated, I want to go back to my editing room. So I’m lucky that I have three different girlfriends. That’s just a metaphor. I’m not encouraging three girlfriends. They’ll give you three headaches. One man. One woman.