

CHRIS MENGES, ASC, BSC
INTERNATIONAL AWARD

ASSESSING
THE RED ONE CAMERA

LUCIANO TOVOLI, ASC, AIC
ON SUSPIRIA

American Cinematographer

The International Journal of Motion Imaging

FEBRUARY 2010

THE WOLFMAN

SHELLY JOHNSON, ASC
BRINGS OUT THE BEAST

Redesigning *Dollhouse*

By Michael Goldman

It had already been a high-stress morning for cinematographer Lisa Wiegand and the rest of the crew and cast of Fox's *Dollhouse* by the time Joss Whedon, the show's creator/producer, gathered them for a sit-down on a soundstage in mid-November. The team was not yet even halfway through another long filming day, with the entire cast participating in the final scene of the episode at hand, "The Attic." Whedon announced that 20th Century Fox had decided to cancel the show. Production on "The Attic" and the final three episodes would continue, he added, and the entire second season would air.

Dollhouse chronicles the story of a mysterious organization that wipes the minds of volunteers and reprograms them to perform particular missions for paying clients. The show quickly developed a cult following in its first season, battling its way to a second season despite borderline ratings. In its second season, the show switched from shooting 35mm to digital capture, and Wiegand took over the cinematographer spot from Ross Berryman, ASC, ACS. "Lisa was recommended by Rodney Charters [ASC, CSC], who shot our unaired 13th episode ['Epitaph 1'] last season and brought her on as his B-camera operator — she had worked with him on 24," Whedon explains. "We shot 'Epitaph 1' with digital cameras, but even before that experience, we felt we'd have to switch to digital if the show got renewed. Shooting that episode digitally was the wake-up call for me — I realized we could get more dramatic footage with less light and shoot real quickly, on a lower budget, and I wanted that energy in the show."

"When Lisa interviewed for the job, her competence and intensity for working this way just sparked, and [producer] David Solomon and I fought to get her onto the show," continues Whedon. "The network was a little leery because it was her first credit as a TV-series cinematographer, but we prevailed, and after that our good feeling about her work only increased." Wiegand is eager to credit others for making the gig work out so well, as she demonstrates while picking at a salad

Right: Echo (Eliza Dushku) finds an outfit to match her newly imprinted persona in the *Dollhouse* episode "Belle Chose." Below: Under the supervision of Adelle DeWitt (Olivia Williams, left), Topher Brink (Fran Kranz, second from left), Boyd Langton (Harry Lennix, second from right) and Paul Ballard (Tahmoh Penikett), Echo sits down for a "treatment," which will erase her imprinted personality.



Dollhouse photos by Carin Baer, Richard Foreman, Greg Gayne and Adam Taylor, courtesy of Fox Broadcasting Co.

•|• Cassaday Imprints “The Attic” •|•

The *Dollhouse* episode “The Attic,” which finds Echo (Eliza Dushku) trapped in a perpetual nightmare in which she faces a mysterious villain named Arcane, marks John Cassaday’s directing debut in the episodic-television world. After directing TV news in Texas, Cassaday moved to New York and broke into the comic-book industry, illustrating such books as *Desperadoes*, *Captain America*, *Planetary* and, with *Dollhouse* creator/comic-book writer Joss Whedon, *Astonishing X-Men*.

When Whedon offered Cassaday a turn behind the camera, Cassaday was eager to oblige. He spoke to *AC* about the experience, and here are some excerpts from the conversation:

American Cinematographer: What did you think of the premise of ‘The Attic’ when it was presented to you?

John Cassaday: When I read Jed Whedon and Maurissa Tancharen’s script, I walked over to their office and said, ‘This is a gift. Thank you.’ It was tremendous, and I felt like it was tailor-made for me. This episode is kind of a condensed version of *Planetary*, which gave me a chance to dive into all kinds of different genres from one issue to the next. In ‘The Attic,’ we jump from *Alice in Wonderland* to slick sci-fi to the war in Afghanistan to a horror film. It’s been mind-boggling for me.

Did the fact that the Attic hadn’t been seen onscreen before enable you to contribute to its actual design?

Cassaday: A lot of it was in the script, but I was able to tinker with many facets visual. I’d swing by [production designer] Cameron Birnie’s office every day during prep, and we’d sketch different ideas. Among the pieces I helped design is a large tree that rests in the center of the *Dollhouse* set; it was something special to see my drawings become reality. There’s also an apocalyptic scene where we see what the future will bring, and it involved a big crane shot with a huge greenscreen; [visual-effects supervisor] Mike Leone and I

would go back-and-forth about what I wanted to see [in the final image].

The episode’s nightmare landscape lends itself to visuals that are quite unlike anything we’ve seen before on *Dollhouse*. How did you feel about taking the show into uncharted waters?

Cassaday: It was daunting, but there was also a comfort factor in that my episode didn’t have to conform to everyone else’s. There are moments within the *Dollhouse* where I had to maintain the established look, but then there are all these ‘dreams’ that allowed us to play in some uncharted territory.

Your artwork shows a great understanding of light and shadow and an appreciation for their emotional impact. What was it like collaborating with a cinematographer to realize those effects in a live-action environment?

Cassaday: The visuals obviously matter a lot to me, and more often than not, [cinematographer] Lisa Wiegand and her crew were making it look even better than what I hoped for. There’s a scene in Adelle’s [Olivia Williams] office where I wanted to create a film-noir look with heavy shadows and lights beaming through the blinds. Lisa and her crew set it up superbly. Adelle says something horrible and threatening to Topher [Fran Kranz]. She’s like a cat with a mouse, and when she threatens him, he backs up into this shadow that rests on his face, like he’s putting on a mask. You can still see him, but he’s trying to hide. It was a thrill to shoot, and putting it together in the edit was just as interesting — I felt a strong correlation between the editing process and breaking down panels on a comic-book page.

— Jon D. Witmer

To read our full interview with Cassaday, visit www.theasc.com/magazine in February.



A gnarled, snow-covered tree fills the center of the *Dollhouse* in one of the nightmare sequences in the episode “The Attic.”

during her lunch break. “This experience has reinforced how important my team members are, and I’ve had a great team on this show,” she says. “I’ve relied quite a bit on them. I’ve learned so much, and Joss has been completely supportive.”

Once it became clear *Dollhouse* would transition to digital capture, it was Wiegand who made the choice to shoot 1080p high-definition video using Panasonic’s VariCam AJ-HPX3700, recording to P2 cards in the 10-bit 4:2:2 format (using the AVC-Intra compression scheme). She also worked closely with Whedon to reconstitute the look of the show, a change motivated in part — but only in part — by the switch to digital. “By the time we realized our budget would be cut, I was already a little frustrated with the pace [of production], and I thought we really needed a visceral, visual intensity to carry it all through,” says Whedon. “All these things came together. I realized we could save time and money and also rethink the visual design of the show, which I wanted to do anyway.

“The main change Lisa helped me institute was to get more expressionistic — lots of sparks and pin spots and more depth and separation in the frame without actually putting up walls, and just letting things be a little more traumatic,” he continues. “I threw a little bit of my pedantic attachment



Built onstage at Fox Studios in Los Angeles, the *Dollhouse* sets include (clockwise from top left) the primary two-story common area, DeWitt's office and the dining area.



to realism to the wind and said, 'Let's go for it; let's run more handheld with lighter cameras and let the visuals work with us.'

Wiegand offered the production a few camera options, but she strongly preferred the VariCam, which is seldom seen in the episodic world. "We really liked the mobility of the Sony PMW-EX3s we used on the 13th episode last year, and we wanted something that could bridge the look of that episode and the look of the rest of season one, which was shot on 35mm in a different style," Wiegand explains. "So I chose an ENG-style camera, larger than the EX3 but not too heavy. I knew we would do a lot of handheld work and would want to be really mobile, so ENG seemed the way to go. I didn't feel [Panavision's] Genesis or [Sony's] F35 or F23 would lend themselves to some of the smaller sets and all the handheld work."

Furthermore, she felt strongly that it was more important to consider setup speed and chip sensitivity over the advantages of a larger chip. She calls the VariCam's $\frac{2}{3}$ " chip "a happy ENG medium. We give up some of that nice falloff and depth-

of-field you get with bigger chips, and a bit of latitude, but we gain speed and lighting advantages. The Red [One] would have given us more latitude because it captures more data, but we would have needed more light; also, we shoot so much action that we felt the VariCam was better suited to being bumped around. It was sort of like shooting with reversal film instead of negative: we had to nail our exposures right off. But that was okay. We had our monitors and waveforms.

"A lot of shows that go from film to digital use the F35 or the Genesis largely because they're trying to preserve or create a film look digitally," she adds. "We weren't concerned with that. We were fine with letting it feel different, letting it feel digital. The show is sci-fi, it's about technology, and it didn't need to feel like film."

Wiegand and associate producer Chris Cheramie worked out the tapeless workflow, which comprised recording to P2 at 1080p AVC-Intra 100, with the VariCam set to the Film-rec 600% setting for increased latitude. (The show usually used two cameras rigged with Panasonic AJ-

CVF100G color viewfinders. Other Panasonic models were incorporated for second-unit and specialty work periodically.) Robin Charters, Rodney Charters' son, was added to the crew as digital-imaging technician and built a plan to back data up to D5 tape in post. But on set, they relied exclusively on P2 cards and hard drives. "We shot straight to P2 cards, and on set, Robin downloaded the cards to drives, creating double backups, and then sent the cards and one hard drive to Level 3 [in Burbank], where they created dailies from that data and backed up the data to D5," says Wiegand. "The 3700 only goes to 30 fps progressive, so we couldn't overcrank as much with that model, but whenever we did slo-mo shots, we used the Panasonic 2700, which shoots up to 60 fps but at 720p. We got a little less resolution, but for those shots, we were willing to give that up for the ability to shoot 60 fps."

There were other adjustments to consider, she adds. She opted almost exclusively for Zeiss DigiZoom lenses, and that meant that "because the camera is an ENG camera, we do have to back-focus every time we change a lens, and sometimes after a camera has warmed up a little bit." But she emphasizes that the adjustment was merely a matter of developing a rhythm for doing things a slightly different way. "Our focus pullers worked in two different ways. Our A-camera focus puller, because that camera was mainly handheld and moving quite a bit, liked to be near the camera and pulled by distance, so he had to back-focus a lot more than our B-camera focus puller, who pulled off a monitor because he was often on very long lenses and moving a lot less." >

Dollhouse creator/producer Joss Whedon and Dushku share a moment between takes while shooting the episodes "The Public Eye" and "The Left Hand."



Beyond altering the method of acquisition, the biggest corresponding change instituted by Wiegand was the modification of how sets were lit. Whedon says the lighting changes were about "creating different moods for each set — giving each set its own character and a more sci-fi feel than what we had the first season." Wiegand accomplished that by re-evaluating virtually everything. She explains,

"We took out a bunch of lights that were on the set, searching for a contrastier look. We added a lot of blue to Topher's office, making the main area of the Dollhouse warmer so that his office and the imprint room [where memories are erased and reprogrammed] are a lot bluer, a lot cooler. We changed many things, mainly trying to achieve an image with more contrast and color separation.

"There were a lot of space lights in the main body of the Dollhouse last season, and we removed about half of them and brought in large Chimeras with tight grids to focus the light and keep it moody," she continues. "Some of our smaller spaces had a lot of high-tech equipment, like machinery and monitors, which we liked to make glow. We purchased some Rosco LitePads, which we used a lot on 24, and taped them on monitors to throw a nice, cool glow on people. They're 5600°K, and since I mix color temperatures a lot, they helped make a nice contrast from the look of last season. One of our favorite color combos was a tungsten light with Half Blue and Half Plus Green gels. Allowing the characters to travel through different color temperatures gave the image more depth than straight white light."

Whedon now says that he "can't imagine shooting film for television any more." In particular, he's in love with being able to judge imagery on set off a 17" Panasonic monitor without having to wait for dailies. That's not to say the dailies color-

correction phase, handled by colorist Richard Flores at Level 3, and the final online, also done at Level 3 by colorist Larry Field, weren't important. Each day's dailies normally went from Flores to Wiegand as JPEG files and standard-def DVDs. She also monitored Field's work during the online process via ProRes files sent to her on hard drives by Level 3. Wiegand often distributed notes about the footage to the post team each day, but she notes that the rhythm she developed with Flores and Field gave both of them an intuitive understanding of how her imagery typically needed to be tweaked to fit the show's visual schemes. That's because the production utilized a proprietary look-up table on set that allowed Wiegand to "shoot less for the actual contrast we will have in the end," she says. "The LUT expands our latitude somewhat so that we get more rendition out of high-lights and shadows. But we basically treat the data more like a negative; we get more information than we'll need, and then we can blow out highlights and crush blacks when we go into post, if we need to."



Cinematographer Lisa Wiegand (left) supervises a setup on location in Malibu for "The Left Hand" while A-camera operator Jay Hunter and 1st AC Reza Tabrizi find the frame.

Wiegand never did finish her salad — duty called. Even as Whedon wandered off to ponder the best way to wind up his show with a post-apocalyptic bang that connects threads briefly visualized in 'Epitaph 1,' Wiegand's focus remained firmly on "The Attic." As she packed up her lunch, she conceded, "It's been a totally insane day." And it wasn't done yet.

TECHNICAL SPECS

16x9
High-Definition Video
Panasonic VariCam AJ-HPX3700,
AJ-HPX2700
Zeiss DigiZoom lenses

