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THE WOMEN by Rae Contreras BEHIND THE GURTAIN

The field of visual effects has been responsible for some of the iconic movie images of our times; think of the White House blowing up in Independence Day, Forrest Gump shaking hands with JFK in Forrest Gump, Batman flipping the Joker's truck in downtown Gotham in The Dark Knight. Often, the audience is so thoroughly transported to another reality it can be easy to forget that, in the real world, it takes an incredible amount of work to get these images on screen. And while these films' typical audience may be 14-year-old boys, an increasing number of women are now taking the reins as visual effects producers. Four of them offered to share their insight on what it takes to be a visual effects producer, how they work with the likes of James Cameron and Martin Scorsese, and how they adapt to the ever-changing technology, increasingly tighter budgets, and dynamic personnel. And since this is the entertainment industry, where there is never one way to do something, these four PGA members offer four different perspectives — as a partner at a studio (Shannon Gans of New Deal), an independent producer (Joyce Cox), an executive (Debbie Denise of Sony Imageworks), and a freelance consultant (Susan Zwerman).

As you walk through New Deal Studios, you'll notice that models built for past projects are the core design element. The garbage truck from The Dark Knight isn't a real truck; it's a miniature sitting on a ledge in the studio's stage. And the jet from Live Free or Die Hard didn't crash and burn like it did in the film; it now hangs from the ceiling in New Deal's entryway. The workshop environment generates a creative atmosphere, and this isn't accidental. "It takes just as much creativity to provide a space for someone to come in and be creative as it is being that person who comes in and creates," says Gans, who along with partners Ian Hunter and Matthew Gratzner has been operating New Deal Studios, a full-service visual effects facility, since 1995. And since Gans wrote the business plan for New Deal as her senior thesis while in business school at USC, no one is better suited to serve as the company's CEO, with Hunter and Gratzner acting as VFX supervisors. "Running a business is very creative," she observes. She likes to joke to her partners, "You guys have a blank canvas and a tin of paint, and I have a bank account and I can spend it any way that I choose."

Their philosophy in working with clients is built around trust. Gans notes, "It's tough being in production, so in terms of working with a visual effects department, art department, director and producer, it's all about understanding where they are coming from and making their lives as easy as possible." As filmmakers, Gratzner and Hunter understand the boundaries when working with directors. Says Gans, "We approach visual effects from a filmmaker's perspective, not an artist's perspective. We very much try to focus on the end project, which is important because we have so many different departments. It's everybody all working toward that image on screen because that's what people remember."

It's that trust that keeps directors coming back. The studio just wrapped Shutter Island with Martin Scorsese, with whom they had worked on The Aviator. "His team works in a particular way and likes a lot of flexibility, but with miniatures effects you have to make decisions early on, so we've created a workflow that really works for him," she explains. "We have customized the way we do things to fit with their style. We have really solid management practices and use technology to create efficiency, so we allow ourselves some time to play and to allow those changes."

In addition to Scorsese, the studio has a great relationship with Dark Knight director Christopher Nolan. Gans says of Nolan, "I love that he really fights for the image, because it does make such a difference. He's very passionate and particular about his projects, and the more particular and passionate you are, the more we love it, because we'll give you exactly what you want."

Having worked on movies such as X2, Superman Returns, and now Avatar, Joyce Cox is no stranger to working with fastidious personalities. Like Gans' insistence that producers



must be good facilitators, Cox adds, "being a good psychologist is a great thing because there's a lot of really dynamic personalities. There is a high percentage of really smart people in visual effects, everything from complete and total artists to hard-core scientists and every combination of that in between. As a producer, you have to be able to understand and facilitate the technology as well as the art."

Cox works as an independent producer on the production payroll, but notes that she has to be blessed by the studio. "It can be a volatile area because you commit to a budget and schedule before you know what you're making." In order to stay on track, she uses technology to help formulate her approach. "I work with the visual effects supervisor and get through the script. We talk to the director, cinematographer, and other key people as the script goes from written form to storyboards. Then we put together a pre-visualization team to lay out visual effects sequences. The pre-viz becomes a tool for all the other departments; for instance, the camera department can figure out what kind of photography support they need to create the various shots."

However, on her current project, Avatar, Cox's routine is a little different. In addition to being brought on during the last year of production (rather than at the beginning, as is typical), she noticed how James Cameron's forward-thinking approach put his vision on the fast track. She notes, "The difference with this film is how all the pieces were brought together. All of those tools are in the hands of a very gifted storyteller. He's doing things that typically would have had to come through bands of animators to get his hands on the tools to create a certain camera move, digitally or otherwise." Cox says of Cameron, "He's a lot of fun to work with. He's a really brilliant and gifted guy. And I think this film is a look into how films will be made in the future, though it will probably be more streamlined so that it's a more flexible tool."

According to Cox, streamlining is key to the future of visual effects. "Essentially, you're dealing with man-hours. It



From top to bottom: Richard Ewan (left) and a New Deal employee (below) work on models for Night at the Museum 2.

boils down to how much time and how many bodies can you have sitting at a computer, and for how long? That will tell you how much work you can accomplish. People look at digital effects and don't realize how labor-intensive it really is," she explains. "Toward the end of each movie, you have digital artists living under their desks."

Debbie Denise, executive producer at Sony Imageworks, would also like to see some pressure lifted off artists — but for a different reason. "I would like to help come up with a way for artists to be creative without having to deal with the constraints of the technology," she says. "For instance, I think it would be awesome to have something like what they did in Minority Report [in the "pre-vision" sequence where Tom Cruise's character manipulates images on an interactive monitor] in real life. It's very cool to work on films that forecast the future. Science fiction writers in the '50s came up with all these wacky ideas and now we're living those ideas, like the flip-phone on Star Trek. I would love to do something like that, to have something that presents such an alternative universe we can't even conceive of yet."

Denise began her career at the legendary VFX training ground Industrial Light and Magic, having been introduced to the company after watching Who Framed Roger Rabbit. She says, "I looked at the credits and it said Industrial Light and Magic and I said, 'I should do that, I should go work there." She applied aggressively until she landed a commercial job and wouldn't end up leaving until she arrived at Sony Imageworks in 1995. Previously, she and Imageworks President Ken Ralston had worked on a couple of movies together when Ralston was offered the job of president. He insisted that Denise come with him. "He said, 'I just create images and work with directors; I need Debbie with me to do all the other stuff,' the stuff that we producers do," she recalls.

As an executive, she explains, "You have to be able to look at the production you're overseeing from a 10,000foot view. This can be difficult because we producers like to get our hands dirty and get in there and look at all the details — the spreadsheets, the shot bills, at everything but as an executive producer, you don't have the time. So you have to hire good people, trust them to do the detail

work well, and to know when to ask for help. So it's like, are you on the floor of the forest looking at the pine needles, looking at the trees? Or are you above the trees, watching for forest fires out in the distance? As executive producers, we're watching for forest fires.

Imageworks' current projects include 2012, Cats and Dogs 2, Smurfs (now in development),

and Alice in Wonderland. She says of the latter, "It's a really stunning movie. It's really exciting to see dailies because the shots are spectacular. The footage has a look you've never seen before, thanks to the imaginations of Tim Burton, Ken Ralston and the new rendering system we have. It's based more on reality as opposed to computer graphic lights."

In discussing Alice in Wonderland, it's clear that Denise is versed in technology and business. "In the past, you didn't need to have as thorough a technical understanding, but I think today you are handcuffed if you don't understand the technology," she says. "The visual effects supervisor is the one who sets the technology for the shot. But I find a lot times that producers can help come up with creative solutions, and it also helps you to deal with visual artists and understand what they're going through. If you don't understand the complexities of the task that they're faced with, it's very difficult to help them get around the obstacles." She thinks that on-thejob training is essential for learning the tools. "The best way to learn the technology is to PA or be a coordinator and learn it from the ground up."

On-the-job training is how Susan Zwerman got a crash course in how to produce convincing aliens and realistic water. "The film Alien Resurrection was one of the most challenging films I have ever worked on," she says. "It had huge animatronic aliens to set up and film, as well as min-





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iatures and matte painting set extensions. I had to learn quite a bit really fast. And on *The Guardian*, the challenge was to achieve photo-realistic-looking water and create huge stormy sequences. We created a system of CG water pipelines for this film. It was a big learning curve for me and required many long hours."

She started out as a production assistant on Dino De Laurentiis' King Kong in New

York, where her job was to guard the ape after he fell off the World Trade Center. "The crowd got out of control and we had to shut down the World Trade Center," she recalls. "The next day, the producers hired 5,000 extras."

After production-managing several big visual effects films in Los Angeles, she decided to enter the field full time. She was hired as a VFX 1st AD on *Tall Tale* and was later moved up to VFX producer. Since then, she has worked steadily as a visual effects producer on movies like *Broken Arrow, Men of Honor*, and *Around the World in 80 Days*. She's also been very actively involved in DGA and PGA committees dealing with new technologies.

Zwerman is now using her experience to teach would-be VFX producers the tools of the trade. In her and co-author Charles Finance's book, *The Visual Effects Producer: Understanding the Art and Business of VFX*, about two dozen of the best VFX producers in the business share their thoughts on the qualities a visual effects producer needs to be successful. Zwerman wants to spread the word as much as she can. "I would like to start teaching seminars on VFX budgeting and scheduling, using the methods described in our book," she says. "And become a guest lecturer at film schools, teaching visual effects techniques to young professionals just starting



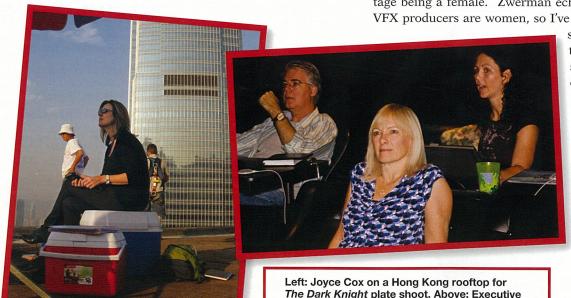
Above, left: Shannon Gans (right) with partners Matthew Gratzner and Ian Hunter. Above, right: Susan Zwerman with her beloved dog Rosie.

out." Zwerman's book is essential for any newbie hoping to rise above the competition with heightened dexterity.

In that same spirit, an employee back at New Deal Studios may have just come into some money. The studio regularly holds contests where the goal is to present a new, more efficient or fun way of doing something. The winner is rewarded with prizes like gift cards and even cash. "We want them to have their mind in the game and think, 'How can I make this better?'" explains Gans. "It's the film industry, we've all come from all over to work in this industry and it should be fun and often it's not. Taking care of those production management type issues allows you to have that fun. At the end of the day, they don't want to worry about the politics; all these guys and gals want to do is come in and do great work."

New Deal has a fair mix of male and female employees, in thanks to Gans' gender-blind outlook. She says she has never encountered any difficulty being a woman in what was, at least in the past, almost an entirely male-dominated field. The others share her experience. Says Denise, "I've been very fortunate. I've never felt like I've been at a disadvantage being a female." Zwerman echoes, "It seems that most VFX producers are women, so I've had no difficulties what-

soever." And Cox notes that although sometimes she is the only woman on a production within a 100-mile radius she has "never encountered any obstacles," though she admits, "it can get lonely sometimes." And while it's not as though the field consciously sets out to be socially progressive, what else would you expect from a craft that predicts the future?



producer Debbie Denise (middle) in a meeting.

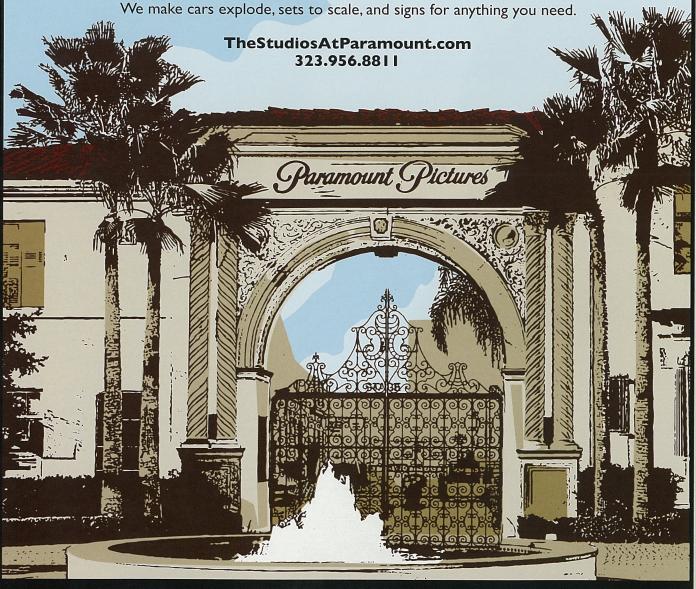


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