

## Joe Pavlo and Paul Tuersley

### Awards galore

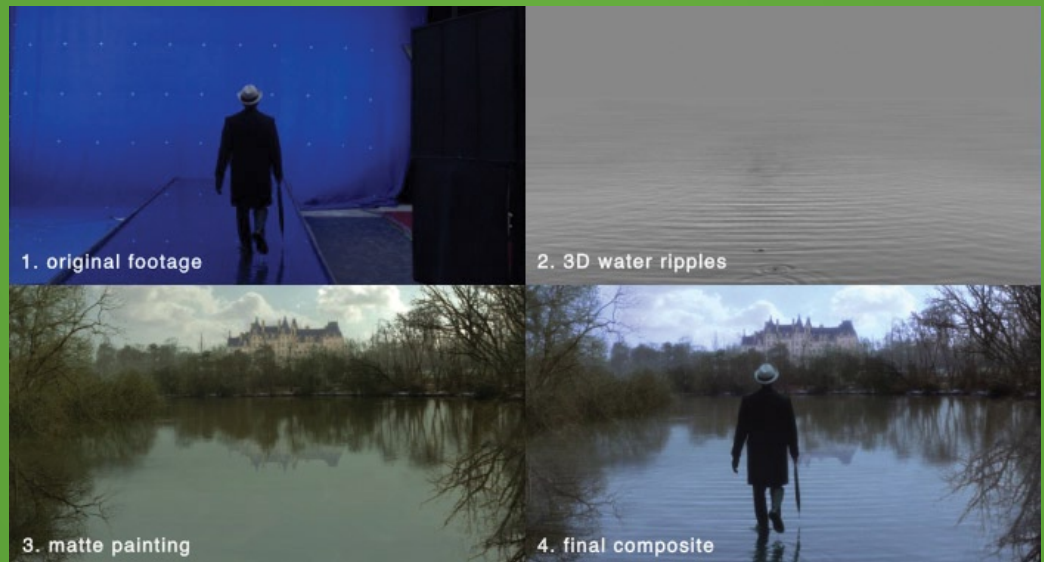
Visual effects artists wield Adobe® After Effects® and Adobe Photoshop® software to create Emmy-award-winning effects for television



In September 2005, visual effects supervisor Joe Pavlo and a group of talented freelance visual effects artists boarded a plane for Los Angeles. They were on their way to the Emmy Awards, having worked on the HBO film *The Life & Death of Peter Sellers*, which had just received 14 Emmy nominations, including one for Outstanding Special Visual Effects for a Miniseries, Film, or Special.

“Just going to the Emmy Awards was exciting enough,” says lead After Effects compositor Paul Tuersley. “We certainly weren’t expecting to win and were shocked when we did. It was an amazing experience.”

Paul Tuersley and other visual effects artists created this shot using Adobe After Effects, Photoshop, and Maya 3D software. Masking and keying in After Effects were used to remove the blue-screen and 2D tracking to match the original camera moves in the blue-screen footage.



**“Adobe software gives us amazing flexibility and power. The minute I saw Adobe After Effects, I knew that desktop software was the way the VFX wind was blowing.”**

Joe Pavlo, visual effects supervisor

Adobe After Effects and Adobe Photoshop software were mainstay tools behind this impressive accomplishment. For more than a decade, Pavlo and Tuersley have used Adobe tools for animation and compositing.

“Adobe software gives us amazing flexibility and power,” says Pavlo. “The minute I saw Adobe After Effects, I knew that desktop software was the way the VFX wind was blowing.”

#### Previsualization in minutes

While shooting *The Life & Death of Peter Sellers*, Pavlo used After Effects and a laptop computer to create rough composite shots. By previsualizing shots on the set and showing them to the director immediately, Pavlo was able to minimize confusion about how shots would look and have a greater likelihood that the right shots would be captured from the outset.

“Adobe After Effects is an amazing tool for previsualization. I can whip together an idea in literally 10 minutes and ask the director if it’s what he had in mind. Shoots go much more smoothly—it’s brilliant,” says Pavlo.

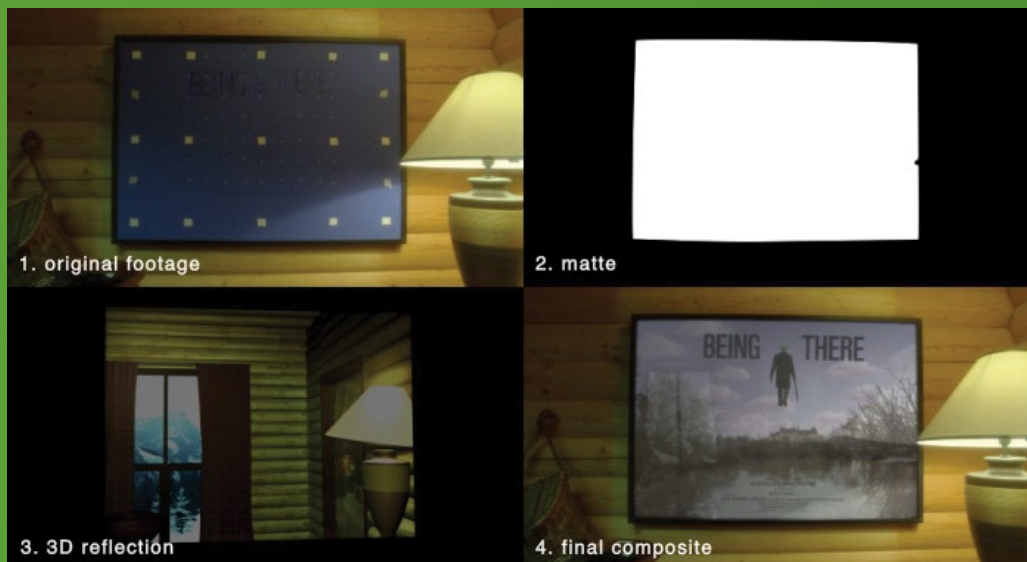
#### Walking on water

After shooting was complete, work on the visual effects began. Tuersley immediately got to work creating about 30 shots for the film. The most complicated shot was the *Being There* shot in which the Peter Sellers character, played by Geoffrey Rush, walks on water out across a lake. “There were some tricky shots in the film that After Effects and Photoshop handled with ease,” says Tuersley.

The first part of the shot involved compositing footage of Geoffrey Rush, filmed against a blue screen, over a matte painting of a lake and landscape. Tuersley used After Effects to align tiled shots of a real lake and landscape, creating a high-resolution image for matte painter Dave Gibbons, who reworked the backdrop in Photoshop to create the finished image. 3D animator Jon Graham used Maya 3D software to create simulated water for the lake, including ripples and splashes caused by the character walking on it.

Taking these elements into After Effects, Tuersley used the paint function to erase the blue-screen tracking markers around the actor. He then used masking and keying to remove the blue-screen and 2D tracking to match the original camera moves in the blue-screen footage.

For this shot, Tuersley and The Senate team extended the camera move at the beginning of the shot and lined it up with an earlier comp using the 3D compositing system in Adobe After Effects.



## Tricky effects, accomplished on the desktop

In the second part of the shot, the Sellers character floats up into the air and the image freezes as the camera pulls back to reveal that the image is actually a *Being There* film poster hanging on the wall of Sellers' chalet. The effects team used 3D tracking software to re-create the camera moves from the live-action shot inside the chalet. Tuersley brought the result into After Effects, using the software's ability to import Maya 3D camera data. He was then able to extend the camera move at the beginning, so it started within the picture frame and lined up with the earlier composition. 3D animator Andrew MacLeod then created a reflection pass of the room surroundings that Tuersley integrated into the shot to make the poster look like it was behind glass.

"The entire shot was completely seamless," says Tuersley. "Extending the camera move at the beginning and lining it up with the earlier comp was the most complex part of the shot to achieve, but it was made considerably easier by the excellent 3D compositing system in After Effects."

## Gore without pain

In 2005, Pavlo, Tuersley, and the rest of the team at The Senate also worked together creating more than 300 shots for the HBO drama series *Rome*, which the Visual Effects Society has awarded for Outstanding Visual Effects in a Broadcast Series. Tuersley created about 40 shots as a lead visual effects compositor. Pavlo and Tuersley both worked on-site at the impressive *Rome* set at Cinecittà Studios in Rome.

"Episode 11 called for some very interesting VFX shots—including possibly the only motion control shot in the series—and a gladiator arena fight sequence with gladiators being killed in various nasty ways, including having a head, an arm, and a leg chopped off," says Tuersley.

Back at The Senate, Tuersley composited the gladiator shots, some of the most challenging shots in the series. It took about two months to complete four shots that made up just 6 seconds of screen time. The creative team included Tuersley, compositing in After Effects, and five 3D artists who created the dismembered limbs, stumps, and blood using Maya 3D and Next Limit RealFlow. Visual effects supervisor James Madigan oversaw the completion of the shots in post-production.

Tuersley took raw shots into After Effects and use the Tracker Controls to stabilize them, temporarily removing the original camera motion. He then erased the actors' real arm, leg, or head. During the planning of the visual effects sequences to be shot, Pavlo acted as a test case on the set for many of the shots.

"We did loads of test shots in which we chopped off my head or my arm and put the shots together in After Effects to show to the director," says Pavlo. "It was great fun and helped us plan how everything would be shot. There's all kinds of footage of me writhing in agony—it was all very Monty Python."

### Company

**Joe Pavlo and Paul Tuersley with The Senate Visual Effects**  
London, England  
[www.senatevfx.com](http://www.senatevfx.com)

### Challenges

- Get visual effects shots right the first time
- Communicate visually with the director and crew
- Create award-winning effects quickly and efficiently
- Accomplish tricky shots all on the desktop

### Solution

- Use Adobe After Effects and Adobe Photoshop software to complete dozens of shots for *The Life & Death of Peter Sellers* and *Rome*
- Previsualize shots on-set with Adobe software
- Make shots look seamless using advanced features in Adobe After Effects such as 3D compositing

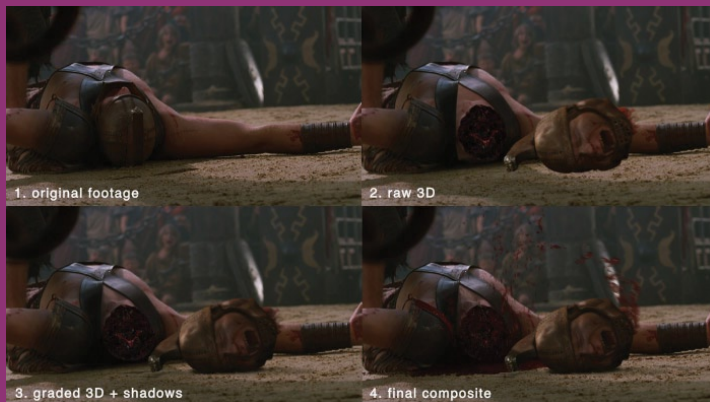
### Benefits

- Awarded an Emmy for Outstanding Special Visual Effects for a Miniseries, Film, or Special for the HBO film *The Life & Death of Peter Sellers*
- Awarded Outstanding Visual Effects in a Broadcast Series for *Rome* from the Visual Effects Society
- Smoothly coordinated shots and minimized the need to reshoot
- Generated complex shots with ease

### Toolkit

- Adobe After Effects
- Adobe Photoshop
- Maya 3D
- Next Limit RealFlow
- Apple PowerBook G4 computers running Mac OS X
- Apple Power Mac G5 computers running Mac OS X

For the gladiator shots in *Rome*, Tuersley used Adobe software and worked with five 3D artists who created dismembered limbs, stumps, and blood using Maya 3D and Next Limit RealFlow. Because of the complexity and sophistication of the shots, it took about two months to complete four shots that made up just 6 seconds of screen time.



In one of the shots, the main character, Pullo, uses his shield to decapitate a gladiator he's just knocked to the ground. The shot was filmed at a low camera angle, with the shield actually hitting the ground a safe distance from the actor. Tuersley modified the shield to make it appear to hit the ground by the gladiator's neck, reconstructing the ground and removing the dent caused by the original shield hit. He also cut out and reanimated the gladiator's right arm to give him a bigger reaction as the shield came down.

To replace the obscured leather straps on the gladiator's chest, Tuersley used Clone Paint in After Effects to create the straps as a still frame and then used the Reshape effect and some animated masks to warp them so they matched the gladiator's chest movement.

Meanwhile, the 3D department tracked, modeled, textured, and lit the various limbs and stumps and created fluid simulations for the blood. Tuersley's job was to take the many 3D render passes (limbs, stumps, blood, shadows) and composite them into the finished shots. The head chop sequence alone required about 40 render passes. Tuersley was able to fine-tune the 3D lighting in After Effects without having to go back through the 3D process. Finally, he used frame-by-frame clone painting to clean up and blend the various elements.

**“After Effects and Photoshop are so powerful, there’s almost nothing that can’t be accomplished when these Adobe applications are paired with 3D software. I’ve relied on Adobe tools my whole career and they’ve never let me down.”**

**Paul Tuersley, freelance visual effects artist**

“After Effects and Photoshop are so powerful, there’s almost nothing that can’t be accomplished when these Adobe applications are paired with 3D software,” says Tuersley. “I’ve relied on Adobe tools my whole career and they’ve never let me down.”

For more information on Joe Pavlo and Paul Tuersley, please visit [www.adobe.com/motion/PavloTuersley.html](http://www.adobe.com/motion/PavloTuersley.html).

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