

ULTRA MODERN NATIVITY

Artist Martha Fiennes' hugely ambitious *Nativity* installation in Covent Garden is an ever changing, never ending film that's far removed from a conventional piece of filmmaking

DETAILS

Production SLOimage Ltd, IZM Productions

Artist and director Martha Fiennes at SLOimage

Producers Peter Muggleston at SLOimage, Leianna Campbell at MPC Vfx

Vfx/co-production MPC

Vfx team Richard Mckeand, Bill McNamara, Mark Stannard, Yourick Van Impe, Charlotte Tyson, Saber Jlassi, Chris Petts, Maurizio de Angelis, Nimesh Patel, Alex Harding, Kelly Bruce, Leanne Goymer

Early concept creation Virginie Bourdin, Sean Samuels

Programmers Adam Cubitt, Chris Barry

Software developers MPC, Existential

Avid Zoe Izzard

Projection specialist Paul Roberts

Camera Phantom Flex

In a technologically demanding twist on the usual nativity scene, Covent Garden has added an installation to the Piazza centring on a never ending film shown on a three-metre wide screen. The film, inspired by Renaissance paintings, displays an endlessly evolving variation of the nativity scene, acted out in ultra slow motion by the self-generating movie.

The film is the first of director and visual artist Martha Fiennes' 'SLOimage' concepts, which Fiennes describes as "a breakthrough concept in imagery utilising a breathtaking new visual medium platform." For *Nativity* this means a digitally created painting that has a life of its own by means of a complex piece of coding by vfx/post house MPC and software developers Existential.

The way *Nativity* is pieced together is unconventional to say the least. Rather than being scripted, filmed, posted and cut to length, each element in the installation was shot as a separate, independent component that feeds into the film in a largely random way as and when a computer generated sequence deems fit. The sequence played out in the finished piece is unknown to both the makers and the viewers.

"The people, animals and other items, such as the washing line and candles, were shot during a two-day live action shoot. The characters shot for the film include two shepherds, three Kings, Mary, the baby Jesus, Mary Magdalene, Joseph, two angels and the angel Gabrielle. Everyone was shot independently except when there are shot interactions between people (there are three or four of these)," says MPC's Chris Barry. "Everything was shot against green screen at 800fps using a Phantom Flex camera. We also filmed a mouse, which was the only thing filmed at full speed."

Details about each of the filmed elements were added to a huge database at MPC, along with information about each of the backgrounds, special effects and lighting details. The database became the reference to all the material that makes up the *Nativity* film.

"The film is procedurally-generated," says Barry. "We feed in content – backgrounds, architectural layers, people, animals, special effects, and so on – along with details of the lighting styles, literally hundreds of different animations and any additional information and footage and, in short, the software chooses what is shown on screen. We add exclusions into the database to ensure weird things don't

happen such as people walking through each other."

How the software chooses what to show is down to a bespoke programme created by MPC and Existential that takes the details in the database and applies them to the nativity scene. "Our custom-built tool takes the Excel database file and we give it some parameters and it creates the literally endless amount of iterations of what happens on screen," explains Barry.

"The action never loops, it stays on the whole of the two months of the installation and never repeats. Certain events need to happen at certain times (including a lady going up and taking Jesus then later giving him back again) so these are synchronised as part of this process too."

The backgrounds, like the characters, also change over time, with the architecture decaying and re-building, both as ancient buildings and modern constructions. "A lot of concept work went into the architectural elements, analysing how classical paintings were composed," says Barry. "There are multiple states of architecture – both modern and ancient – in multiple environments shown in the piece. There are at least 50 different combinations for the architecture and backgrounds alone."

The design, development and software development of *Nativity* has been a lengthy process that's taken a year to develop to the finished piece. The post production work alone took over six weeks, with MPC's offices in London, New York and Bangalore all involved in the post process.

Nativity can be seen at the Piazza in Covent Garden until 5th January 2012.

