

riting To Vermeer is a work of many paradoxes. Its images and memories are simultaneously thought-provoking, shocking, beautiful - and always memorable.

The opera is the latest collaboration between darling of the intelligentsia Peter Greenaway, Saskia Boddeke, Holland's finest avant garde director and renowned contemporary composer Louis Andriesson. Together these protagonists form a powerhouse of creative risk-taking, and Writing To Vermeer is a truly innovative work in terms of ideas, non-narrative format and stage presentation.

Being premièred at the end of the century, it puts both times and contexts of past and present into new perspectives. The work references some of Holland's most dramatic historic moments aided by modern performance technologies more akin to pop videos and rock shows, and its opening run straddles two centuries.

The première caused a notable stir in performance circles with Greenaway - not by his own choice - receiving the bulk of the attention for producing this left-field contemporary work. Apart from the fact that he has the name, he's male and he germinated the original idea and wrote the libretto, he's also the first person to point out the importance of Boddeke's role. She did most of the rest.

Greenaway's fascination with Johannes Vermeer has a long prequel. In 1982 he made a film in Rotterdam called A Zed and Two Noughts which featured the life and work of Vermeer. His research on the painter and the contemporary political events during his productive years - the mid 1600s - has been exhaustive.

The intense visuality of moving image which dominates Writing To Vermeer is not mere gimmickry or creative recalcitrance - it informs the production with a real emotional depth and meaning. French cinematographer Jean-Luc Godard suggested that Vermeer was one of the world's first cinematographers as his paintings are consistent with a world created entirely by light. Greenaway believes Vermeer may have used an



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early camera obscura; the construction, framing, cutting and cropping of his paintings - entirely at odds with the classical style of the age - plus the painter's very specific use of light has reinforced this theory.

He also points out that development and experimentation with the first crude optical systems and lenses - for use in microscopes and telescopes - was happening in Utrecht during this time. In fact, the Dutch's repertoire of scientific feats includes the first examinations of spermatozoa under a microscopel

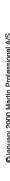
There were several reasons that made the opera an ideal candidate for multi-media presentation. The fact that Greenaway and Boddeke are highly creative risk-takers and have used film and video in their three previous opera productions, Vermeer's potential historical associations with lenses and optics and the fact that his paintings have a genuine filmic quality are just a few of them!

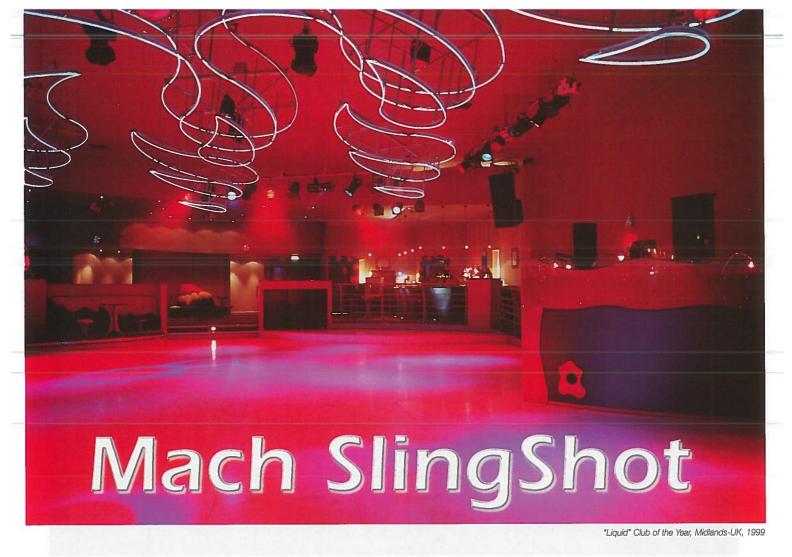
Vermeer himself is absent from the piece. In fact, there are no male leads at all onstage. The story is of the three women in Vermeer's life - his wife Katrina Bolnes, his mother-in-law Maria Thins and his model Saskia de Vries - and the letters they write whilst he is away for 14 days in The Hague authenticating paintings.

The letters tell of day-to-day harmony, bliss and domestic trivia – much like the pastoral nature of his paintings. This is sharply contrasted to the increasing external political events and unrest of the time like the Tulip Crash, growing public discontent, the murder of dignitaries the De Witt Brothers by the mob and the territorial aggression of France under Louis XIV. The external action culminates in the French invasion of 1672, when the Dutch opened the dykes and deliberately flooded their country to repel the invaders, dramatically ending the Golden Age of economic prosperity.

Het Muziektheater, home of De Nederlandse Opera in Amsterdam, was built in the seventies and offers an enormous space and considerable staging opportunities. The Writing To Vermeer set consists of a massive 12m by 9m canvas tilted forward at 20 degrees set in a tray of water -







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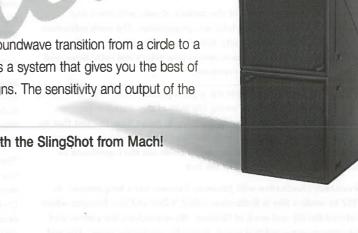
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to represent Holland. All the action takes place on the canvas or in the water surround.

Water and other symbolic liquids varnish, milk, blood and ink - play a pivotal linguistic role in the piece. Actors/singers receive frequent dousings from rain pipes and pre-rigged tanks of water and other substances located in the roof. They are soaked for most of the opera's continuous hour and 45 minutes running time and the final denouement sees a waterfall cascading down over the canvas washing away the blood and guilt of the people following the De Witt murders and representing the flooding of the country.

The Opera House had to install extra water management facilities and piping for this production. Three enormous water tanks and pumps are located under-stage, holding eight tonnes of water and pumping 2,000 litres per minute round the system when the waterfall is in full tumble. Another under-stage device splits the flow between the two main water effects the tray beneath the canvas and the waterfall at the end - and also pumps water up to the rain troughs above stage. A thickening agent is added to the water going to the waterfall which increases its viscosity, making it appear to move in slow motion.

The spectacular moving image elements of the show were co-ordinated by Peter Wilms, who is rapidly carving out a niche for himself as a creative video/projection director and programmer. He is assisted by Marita Ruyter who, like Wilms, has worked with Greenaway and Boddeke for a few years. Both were also involved in their other recent opera, Christopher

Columbus, which opened in Berlin two months earlier.

Video preliminaries on Vermeer commenced 12 months in advance. All concerned were keen to escape from conventional viewing angles and perceptions and move on from just using squared up screens positioned end-on to the audience. So emerged the idea of projecting some of the footage onto the floor, using gauzes at various points and generally creating different layers and depths of projection - and perception.

The film in the opera was produced by Kees Kasander (Greenaway's regular producer) and edited by Elmer Leupin, with Ruyter overseeing its production. The footage contains scenes - both realistic and symbolic, representing the historic references - invasion, assassinations and economic collapse, as well as replications of Vermeer paintings and the handwriting of the three women. Calligraphic text is a frequently recurring building-block in Greenaway's work. The handwriting appears at various moments of the opera, ghostlike with no hand or pen visible, just the unfolding text marching its way across the screens and up the

Moving image is formatted for three different types of projection - film, video and scrolling slides. The slides are projected by two Pani BP4s. One belongs to the opera house and is rigged over-stage, pointing vertically downwards, projecting handwritten texts and 'floors' which creep over the canvas. The other Pani is a brighter Compact version and sits front-ofhouse, projecting onto a variety of surfaces over the set. Both have PIGI single scrollers, a favourite of Wilms

which, with the stability of the HMI lamp, are ideally suited for this type of show. Both scrollers are mounted vertically to enable movement along the upstage/downstage axis.

Three onstage video screens, rigged at different upstage/downstage depths, fly in and out on the house bars during the performance, in unison with their own three rear-projected Eiki LC1 projectors rigged in cradles also on house bars. There are a further two Digital Projection 8GV video projectors, one at front-of-house and one in the roof pointing directly downwards.

These are again used for projections onto the canvas floor and into the water.

All video projectors are fitted with conventional Pani dimmer shutters converted to take a 0-10v control signal. This allowed Wilms to fade video images to complete black rather than the grey that is produced by video projectors without an image. With five machines operating in close proximity, a dark stage soon becomes unachievable without such devices.

Finally there is a rear projected 7kW 35mm cinema projector which throws Cinemascope footage onto the 17.5m rear cyc. In addition to these surfaces, a front-of-house scrim flits in and out at strategic moments and takes projection from both front video and slide projectors.

Wilms explains that much to the chagrin of the film purists on the technical and creative crew, the

Van de Aa manipulated the sound of breaking tree branches into an animated, fractured frenzy for the moment when the De Witt brothers are murdered by the mob.

Accompanied by explicit video, this sent the woman sitting next to me momentarily into the crash position, hands clamped over ears!



footage was initially shot on video with some on 16mm and transferred to film, impostoring for the 35 mm parts. This was a practical decision. Het Muziektheater is the largest of the spaces on the current itinerary, and with the others not having the luxury of sufficient room for widescreen rear projection, this source had to be

All video material is stored on five Doremi hard drives fed via a matrix and RGB data dissolves to the various video projectors. All video hardware and the projector dimming shutters are controlled by a Mac running Dataton multimedia show control software, programmed and operated by Wilms. He also uses this to trigger the PIGI computer controlling the scrollers, bringing the entire visual element into a single control hub.



Librettist and co-director Peter Greenaway with codirector Saskia Boddeke Above right, lighting operator Dick Jan

The front-end video control system has been instrumental in giving the directors the total freedom to route the various sources to all possible locations, enabling them to experiment with different combinations of material. Looping, fade times and image sequences can be programmed, rather then being edited to disk. This flexibility has also been an asset during the

rehearsal period when on-stage time was limited in a busy opera house with a full on-going repertory programme.

This type of control is also perfect for live performances. Cues can be tweaked if the

orchestra changes tempo from night to night - not uncommon at the end of the day the show is ultimately driven by the conductor! Wilms, Boddeke and Greenaway all comment that putting on such a technically ambitious show in the short timescale available simply would not have been possible had they still been reliant on restrictive video disk or tape playback methodology. By contrast, the 35mm projector is switched manually on cue by its own

operator, which has proved as reliable and accurate as any machine!

The video and projection equipment has been supplied by a combination of Creative Technology and Production Arts Europe in the UK and Dutch AV specialists Heuvelman.

Sound and acoustics for classical or operatic performance is a delicate matter which becomes even more complex when the sound is amplified. Opera purists are notoriously hostile to any type of reinforced sound, but with Vermeer already pushing the boundaries of convention, this major technical component came naturally! That aside, the copious energy and action of the piece and consequent high ambient noise levels onstage made amplification essential.

To sound designer and engineer Wilfred Houthuijsen, it's all in a day's work. He's been applying sound to classical works for 25 years and is one of Europe's leading specialists in the field. Vermeer is a great tribute to his abilities. Even the trained ear is hard pressed to realise that the orchestra and performers' clear, precise and natural tones are the result of some carefully applied technical chemistry.

A clue lies in the overall assertiveness of the sound, plus the fact that it's quite obvious to most that the orchestra would never get

> themselves out of the pit into the house whilst simultaneously contending with very powerful singing, water pumping, actors splashing and the chorus clumping around with props if it wasn't for a bit of enhancement. As always, the bottom line with any amplified classical show - although Vermeer is hardly 'classical' in aesthetic or musical terms - is that the reinforced sound is absent and natural. Het Muziektheater had a new

Apogee speaker system installed in the summer which is excellent. It consists of three main clusters of Apogee ALA3 enclosures, six per cluster, and is an in-line system for maximum flexibility, enabling the sound to be very directionally projected into the house.

Around the sides and rear of the auditorium are Apogee AE5 and FH2 speakers, the latter loved by Houthuijsen for their power and energy. Front-fills are six SSMs and AE3s, and there is a ceiling system of AE5s for sound effects which points directly downwards into the house. The ambient system is set up in five different groups from left to right, all run through a matrix and augmented by an under-balcony delay system and two side-balcony delay systems. An enormous effort has been made to pull the sound image down so it appears to be coming from the stage.

All speakers are powered by 41 Apogee DA-800 amps and Apogee DA1 digital processors are used for EQ'ing and delaying the whole system, crossovers, plus the storage of effects presets. The whole is 'supervised' and controlled by an



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For Vermeer, the orchestra were fully mic'd, with particular attention paid to strings and the pianos, using a total of 24 microphones, a mixture of AKG 414s and Neumann KM140s.

Apart from adding a touch of reverb, they were simply brought up into the mix and out of the pit to come alive with the rest of the performance.

The sound department built a further four AE3 wide dispersion front-fills into the set for Vermeer, primarily for the vocals. The three principals, the chorus and the four person children's chorus are all on radio mics for which Houthuijsen used a Sennheiser 1046 receiver system.

Houthuijsen is very much a feely, hands-on engineer who enjoys 'riding the faders' of his Yamaha PM4000 throughout the show. An additional Yamaha 02R console deals with the 13 digital musical inserts fed into it via ProTools software. This is then fed into the PM4000 and into the surround-sound speakers at the back of the house. Originally it was planned to trigger these with the video by Dataton, but the ProTools' two-second kick-in proved too slow, so control passed back to the sound department for manual operation on cue.

The electronic inserts were created by talented young Dutch composer Michel Van der Aa. They heighten the often shocking real-world moments, working in tandem with the moving image, jerking everyone from Vermeer's domestic bliss into facing the violent external issues of the day. Some of these sonic moments are incredibly graphic! Van de Aa manipulated

the sound of breaking tree branches into an animated, fractured frenzy for the moment when the ill-fated De Witt brothers are castrated and murdered by the mob. Accompanied by explicit video, this sent the woman sitting next

to me momentarily into the crash position, hands clamped over ears!

Lighting and set was designed by Michael Simon from Germany. Apart from the canvass, the other main feature of the set was six side-stage vertical towers with moving drawbridges that connected with the canvass.

Associate LD Marc Thurow explained that lighting is very much a servant to video in terms of Writing To Vermeer's visuality. They used a total of only about 80 lighting circuits, assorted fixtures, culled from the Opera House's own stock.

Lights are almost entirely located from side stage to avoid interference with the screens and obviously, with the amount of water onstage, floor lighting was not an option. The only overhead lightsources are 12 Martin PAL 1200s, not seen moving, but used for precise highlighting and pinpointing of actors and props on the canvas. Five ARRI 4K fresnels are used for

Left, video co-ordinator and director Peter Wilms and Marita Ruyter

Inset, sound designer and engineer Wilfred Houthhuijsen

strong slices of side light from one side, and the rest are a mixture of house profiles, fresnels, pars and low voltage lamps. The water surrounding the canvas is lit very effectively, bouncing reflections enthusiastically around the stage.

Lighting moods plays a lot on colour temperatures - it's either warm or cold shades of white, with saturated colour and tinted shades virtually absent. The simplicity of the

monochromatic tones works in tandem with the stage action and the moving image, adding a further layer of filmic montage.

Lighting control is from the house Compulite Ovation 4D console run by Dick Jan who heads up the lighting department for this production. Thurow comments that it has been very enjoyable working with the highly motivated and positive attitudes of the primarily Dutch crew at Het Muziektheaterl

Writing to Vermeer has received fantastic critical acclaim from those enthused by the ideas and the creative coherence of experimental opera. It's doubtful whether the conservative English operatic establishment would have let them get away with it, but the Dutch psyche and culture are totally different. It wraps in Amsterdam in early 2000 and moves to Australia to play the Adelaide Festival in March before moving to New York for a month in July. It will probably be revived at Het Muziektheater, but is unlikely to be performed in the UK in its current format.

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