

imitating the dog: Lighting Design

Andrew ‘Crofty’ Crofts on lighting for imitating the dog

introduction

Andrew Crofts designs lighting for imitating the dog. His work with the company includes *War of the Worlds*, *Frankenstein* and *Macbeth*. Lighting an ITD production means lighting for a live audience and for cameras simultaneously, while keeping light off the projection screens. Here he explains how that balancing act works in practice.

This document is based on a written interview. Andrew's answers have been edited into continuous prose; the words are his own. A short glossary at the end explains the technical terms.

› Read this alongside the companion document: Lighting Design – Technical Plan



Andrew Crofts in *Frankenstein* (2024) rehearsals

the lighting process

Starting with the rig plan

imitating the dog shows usually look quite different to a lot of other theatre shows, and come with some specific extra considerations around how to light them. But all the usual considerations don't go away – they're still there too! The starting place for me is to put a rig plan together: a kind of map of where all the lights will be positioned so that they can do everything we need. To do this, the first things I want to know about are:

- How we're going to be using video
- If we're using cameras
- What the set will look like
- If there are any specific techniques or tricks we're doing, like the Pepper's ghost effect in *War of the Worlds*.

If we're using cameras, then I need to think about lighting the actors in a way that works on video as well as on the stage: 'lighting for camera'. If there are screens on the stage, it's important to keep light off the screens so the video looks good. Knowing what the set looks like, and whether there are screens hung overhead, also has a big influence, because it can limit where we put the lights, or where they can get a clear shot of the stage from.

Often these considerations contradict each other. The easiest way to keep light off a screen is to use side light, so the light shoots across the stage and hits the actors but doesn't touch the screen or floor. But on a show like *Night of the Living Dead*™ – *Remix* or *Frankenstein*, the shape of the set, with walls at the sides, means there are no side-light positions, and we have to try to replicate those angles using lights overhead in the rig, in 'pipe-end' positions. Often with the box-type sets I'll try to get the lights overhead hanging as low as possible, to make the angles sharper.

Sometimes there are parts of the set we want to light to make them look interesting, like the mesh panels in *War of the Worlds*; other times all of the set is projected onto, and we need to keep the light off it.

Finally, there's considering where on the stage we're likely to need to light in particular ways. The Pepper's ghost in *War of the Worlds* needs a specific kind of side light where, on camera, the subject is very bright against a dark background, so I make sure there are units in position to achieve those things.

Once I've thought about all of that, I start to make a plan of where everything will be put, making sure we can cover all the areas of the stage without the 'spill' of light hitting areas we don't want it to, and that we can make all the effects work.

I also like to include lights that the audience can see, sometimes as sculptural elements to support the set, or to add to the aesthetic of a film 'set', with the cameras and other equipment we use present as a reminder that the audience are watching a construction. Good examples of this are the tubes and floodlights in *Frankenstein*, or the moving lights upstage on the long drop bars in *War of the Worlds*.



Frankenstein (2024)

When an idea doesn't work: the heat-ray

One of the big things I've learned with imitating the dog is not to come into rehearsal with too many fixed ideas. The process is very collaborative, and we build the shows together, with all the tech in the room. So it's important not to be attached to any ideas, as they'll often get thrown away or changed. As we approach each scene, we'll try a few different ideas, and you don't always get it right first time. The important thing is that it all gets worked out in the end. Often I'll have an idea for one scene that doesn't work, but that gets recycled and used elsewhere in the show.

I had an idea for the 'heat-ray' in *War of the Worlds* that involved using seven parcans clumped together to create a wide, seamless beam of really strong light. We'd hired in the equipment to make it and spent quite a bit of time faffing to get it right. In the end it didn't really work for the heat-ray: it couldn't move – whenever we saw the heat-rays on screen they were always scanning across the ground – and it was fixed in one place, when we might have needed to use it in different locations. But it did work really well in a different moment, when the Curate is standing under the aliens coming through the roof of the church. It had elements of the alien in it, but also felt like a huge divine light, more in keeping with the Curate's ramblings, a good mix of what would really be happening and a more metaphorical or dreamlike quality.

Lighting with another light source on stage

Lighting and video need to work very closely together, but in a way there's nothing different about it to a show without video. You need to look at the whole stage picture: what's being highlighted or hidden, do the colours work, are they consistent, and so on. With video there's another light source on stage, so the colours particularly need to work across both. Balance is probably the key word: making sure the lights aren't too bright to see the video, but are bright enough for the stage to look interesting and for us to see the actors we want to see.

specific challenges

Lighting for the audience and the camera at once

Lighting for a live audience and a camera simultaneously means serving two requirements that don't always want the same thing. Traditionally, lighting for camera is a lot 'flatter' than lighting for stage: there's a strong reliance on front or 'key' light, which reduces the shadows on people's faces and works well on camera. Often when making film, the lighting can be changed between the different shots and takes, so everything can be re-set to make that one shot work, with the key light positioned above the camera. That's hard to do when your subjects are moving all around a stage, and with a limited number of lights you can't have every possible angle covered. Also, a normal key-light position might throw light onto a screen or another surface we're filming against, and we want to avoid that. Usually it's about creating a compromise between lighting for the camera and creating an interesting stage picture.

My approach is usually to 'paint' the stage with backlight, often using colours, to give everything some depth and three-dimensionality: backlight helps objects stand out from the background, and can be really saturated without making people's faces look too strange, as the light is coming from behind. Then I'll try to pick out the actors' faces we want to see on camera, finding a light as close to a key-light position as possible to do most of the work. Then I'll take another look at the stage picture and add other areas we still want to see, often using side light if possible to avoid set elements, but also to create different tones, with highlights and shadow across the actors who aren't on camera.

One of the fun things to do is create something that looks a bit different on stage to on camera. If the angle of the camera is different to the angle the audience is viewing from, then the relationship of front, back and side light changes. So someone might be really well lit on camera, but appear more abstract on stage, with stronger colours or more acute angles.

Adapting the design on tour

Touring to different venues changes the relationship between the lighting positions, the projection throws and the performing area, and this can be really tricky. The best thing to do is to design in a way that means as little has to change as possible. We're lucky in that we often tour a certain amount of the lighting with us, especially any moving lights or other very specific units. As they're the same every time, we just have to get them in as close a place as possible to where they need to be. We try to keep the lights we use from a venue's own stock to doing simple jobs, so if the type of light changes a bit, it's not a big problem.

Sometimes, of course, it's impossible to re-create the rigging positions exactly. In those situations you just have to do the best you can and find compromises where possible. In each venue we do a cue-to-cue rehearsal, so the actors and technicians check through the whole show, making sure the lights and camera positions work for each scene and shot. During this, we might find that we can't light something quite how we normally do, because the angles have changed. Sometimes we find another way to light it; sometimes we might just need to change the staging a little so the lights can reach where they need to.



War of the Worlds (2026)

for students

The most important thing to understand

For a student on the lighting design pathway working with projection and cameras, it's back to that word 'balance' again. In our work there's a constant visual dialogue between the screens and the stage. Sometimes one leads the other, but often we're happy to let you decide what to look at, so both need to be equally visually interesting. Often I think if you just saw one without the other, they wouldn't make much sense visually, but viewed together, when the balance is right, they create a really interesting picture. They also need to feel like they're part of the same world. So, for example, if there's a strong light in a certain colour from a certain angle in the picture on screen, I'll replicate that on stage, perhaps in a way that isn't super obvious, but that draws the picture together. Or if there's fire or a flickering light on the video, I'll mimic that on stage with an effect. It might not be very prominent in the big picture, but it's those little details that join the image together.

What audiences don't notice

What most audiences don't consciously notice about the lighting is probably what we're trying to hide! The darkness and shadowy bits are just as important as the bright bits. Why are we not lighting a bit of the stage, or only lighting it in a way that outlines or abstracts it? Also, the shadows: I'm a big fan of trying to create shadows on the floor and set as a way to emphasise shape and movement. These are often more noticeable from the circle, or higher up in a theatre. Powerful single-point backlights, or lights from low upstage angles, are good for this, or low downstage angles for shadows on the set.

A favourite moment

Tubes, screens and shadows

I always really enjoy moments of interaction between the actors and the lighting. There are lots in *Frankenstein*, when they touch the tubes, for example. We worked really hard to build those tubes ourselves and to find ways of integrating them in interesting ways.



Frankenstein (2024)

This is a funny answer, but I also really like the way the screens were backlit in *Macbeth*. There were sections of the show where the video didn't cover all the surfaces, and during pre-show and interval there was no video at all. So the screens were backlit in different colours from slightly different angles. Because of the structure of the flats, this created shadows on the screens from the structure holding them up, so you could see them as physical objects, part of a set rather than just a screen. It helps me get a sense of the world being created around the characters, pulling us out of the certainty of the film world. It's a subtle detail, but it works well and it looks cool, so it ticks all the boxes for me.



Macbeth (2023): press set-up photo

glossary

Rig/rig plan — The rig is the full arrangement of lighting equipment for a show; the rig plan is the scale drawing showing where every light hangs and what it does.

Parcan — A simple, robust stage light that produces a strong, fixed beam — no focusing lens, just raw punch.

Key light — The main light on a subject, usually from the front, which shapes how a face reads on camera.

Backlight and side light — Light from behind a performer separates them from the background; light from the side sculpts the body and can be kept off screens and floors.

Pipe-end — A lighting position at the far end of an overhead bar (pipe), used to imitate a side-light angle from above.

Spill — Stray light landing where it isn't wanted: on a projection screen, for example.

Moving lights (movers) — Motorised fixtures that can change position, colour and beam remotely, letting one unit do many jobs.

Cue-to-cue — A technical rehearsal that jumps between cues, checking every lighting, sound, video and staging change in order.

› Try it yourself: Reverse-Engineering the Rules (Exercise 2) in The Rules of the Game: How ITD Builds Its Worlds (Section 2) asks you to identify the lighting rules at work in a single ITD sequence.

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Photography of *Macbeth, Frankenstein* and *War of the Worlds*: Ed Waring.