



CREATING THE ATMOSPHERE

Exploring how to identify colours, textures and shapes to suggest a setting.

Episode 1: What's the word?

Imagine that you were designing a scene. It might be the set for a play, a scene for a film set, a launch event for a music group's new recordings or the entrance to a theme park ride. Your job is to design it in such a way that you create the right atmosphere.

In this case, the scene has to look like an old warehouse. In the past it's been a place of work – designed to be functional and hard wearing rather than attractive. It might have been something to do with the railways. Now, however, it's clearly disused. At least, it looks disused...

To get some ideas you might take pictures or grab images from the internet. What you end up with is a 'mood board' – something that gets you thinking. It might look like this (see page 3).

1. Have you seen places like this anywhere?
2. What do you think they might once have been?
3. What words might you use to describe these? Make a list of some good adjectives.

The scene you are designing won't be anywhere near as big as a warehouse. It should though, get people thinking about these structures.

4. What shapes keep presenting themselves in these pictures?
5. What are the dominant colours? Designers refer to this as the colour palette.
6. What textures can you see? Make a list.



DERREN BROWN'S
GHOST TRAIN



DESIGN
TECHNOLOGY KS3



Episode 2: Seeing how it works

You need to look at something that has been designed to create an impression. Derren Brown's Ghost Train is a great one to use, but there are alternatives. The important thing is that you're looking at something that has been designed to create an effect.

As an alternative to a site visit, look at pictures of a stage or film set or a special event. In either case make some notes (and possibly capture some images) relating to:

1. What colour palette has been used?
2. What textures have been used?
3. What shapes are dominant?

Episode 3: How did it work?

Using ideas like colour palettes, textures and shapes is only successful if they work in creating the right effect. Discuss the notes you made and pictures you captured with other people in your group.

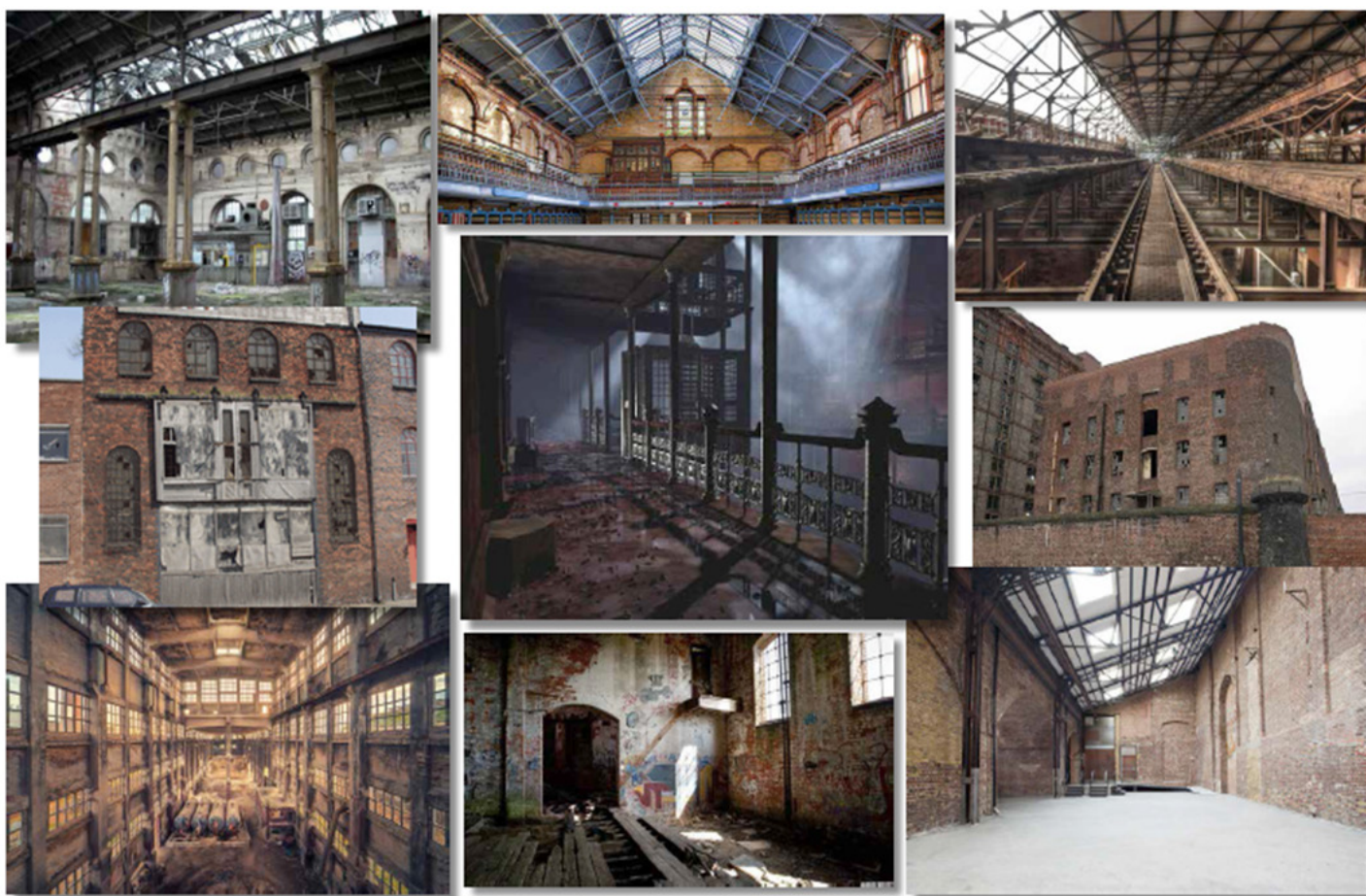
1. Evaluate the overall effect – how successful is the scene in conveying the desired impression?
2. Analyse the impact that colour, shape and texture have made, commenting upon each.
3. Give the designer feedback as to what worked well and what could be improved.



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GETTING THE TEXTURE RIGHT

Selecting materials to convey an image and set a scene.

Episode 1: Choosing the best material

Getting the right look is often crucial in design. A pair of trainers or a smartphones not only has to be good quality; they have to look good. The same thing goes for a ride or attraction in a theme park. The choice of the material is important for it to look the part.

Sometimes, when you're choosing a material to construct something from, you need to think about its physical properties – how strong it is, whether it's durable or how well you can shape it. Appearance is also important – you might have a choice of materials that could work physically but they might look quite different.

Imagine you were designing a scene for a film or theme park attraction. The scene has to look like a disused warehouse. You have to select surfaces to convey the right effect. A researcher has gathered a selection of possible finishes and presented you with these. The project manager has agreed to you being able to use four of them.

Select which of the materials on page 3 you are going to use. Remember the impression you're trying to create.

1. Make a list of the four you're going to use. Remember that your scene will have to make people think they're inside a disused warehouse. Which combination would provide the right effect?
2. By each one, make brief notes for your design team justifying why you've selected the ones you have.
3. Now compare notes with other teams – see which they've chosen and why.
4. Decide if you want to change your mind about any of your choices.



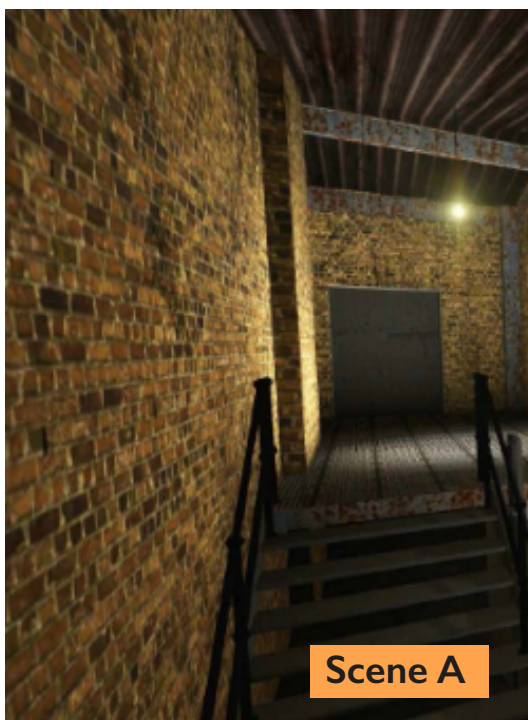
Episode 2: Seeing how it works

Visit somewhere that has been designed to create a particular effect. Derren Brown's Ghost Train is a good example, but there are many others. You could look at a stage set, a design for a party or the inside of a place of worship. The important thing is that it's somewhere that the materials have been chosen to create a certain visual effect.

1. Look at the materials that have been used to create a particular impression and make a list.
2. For each one, identify what it was about the appearance that you think persuaded the designer to select it.
3. Provide feedback on how well you think the designer has used materials to create a particular effect.

Episode 3: Judging the effect

Look at this scene A. This is an attempt to use a variety of materials to create an old warehouse effect.



1. Which surfaces has the designer chosen?
2. How well do they work?
3. If this scene is one that people are going to walk through instead of just look at, how might that change the materials selected and how they're used?
4. Why do you think that designers often mock up their ideas on a computer before setting them up?



NATURAL TIMBER - (FOR FACADES)



Aged Timber



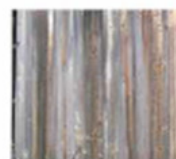
Aged Painted Planking



Lightly Distressed
Painted Planking



Distressed Timber



Aged Timber



Greyed Timber

METAL FINISHES - (FOR ROOF TREATMENTS AND SOME FACADES)



Corrugated Iron Roof



Lightly Distressed
Tin Roof



Corrugated Iron Cladding



Rusted Painted Metal



Rusted Vent



Painted Kingspan
Metal

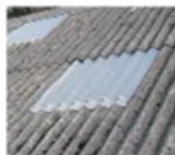
RENDERS (FOR FACADES) AND OPENINGS



Aged render



Aged English
Bond Brickwork



Corrugated
Rooflights



Roller Shutter



Rusted + Boarded-up
Windows



Painted Door

PAINTED TIMBER + OTHER - (FOR THEMING & DETAILS)



Aged Painted Timber



Timber Peeling Paint



Clap Board Painted



Peeling Paint



Painted Wood Signage



Graffiti Artwork + Tags



INPUT AND OUTPUT

Understanding how the input>process>output sequence applies to a range of contexts.

Episode 1: The need to control

Many systems use a sequence of input > process > output. This means that in the system there is some signal which provides information. This information is then processed in some way and as a result, something else happens. This is the output.

An example of this is a central heating control system in a building. Imagine having set up a system where a timed clock and a thermostat control if the heating is on or off.

- The timer indicates what time of day it is and is set up to turn the heating on (if needed) at certain times.
- There is also a thermostat, which detects the temperature in the building.
- The processor receives information from both the inputs (clock and thermostat) and turns the heating on or off.
- If the timer is on (because it's the right time of day) and the thermostat shows that the building is cold, then the heating comes on. The heating is the output.

Other systems work like this as well. This picture shows a pedestrian controlled crossing. If you want to cross the road, press a button. The traffic lights change to red and the green man lights up.



1. What are the inputs in this system?

2. What are the outputs?



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Episode 2: Control for safety

Another example of control systems are rollercoaster rides. If you get to go on a ride such as THE SWARM at THORPE PARK Resort, think about the control systems (as well as having fun).

Before a ride car is set off at the start of its journey:

1. What inputs might the system be looking for?
2. What output then occurs?

The attraction Derren Brown's Ghost Train also has a control system, but it's less obvious.

3. After you've visited it, think about what needs to be controlled and whether it could all be done automatically.



Episode 3: Applying your ideas

Many cars now have a safety system to warn the driver if anyone in a car is not wearing a seat belt.



1. Draw a diagram showing what the inputs and outputs of this system might be.
2. Explain how the system distinguishes between an empty seat and an occupied seat.

