Lighting Workshop

W. Eugene Smith

Annibale Carracci
Pieta (1599-1600)

Caravaggio
Supper at Emmaus (1601)

Chiaroscuro

Chiaroscuro

(Light-Dark)

Rembrandt

Mike MacGregor

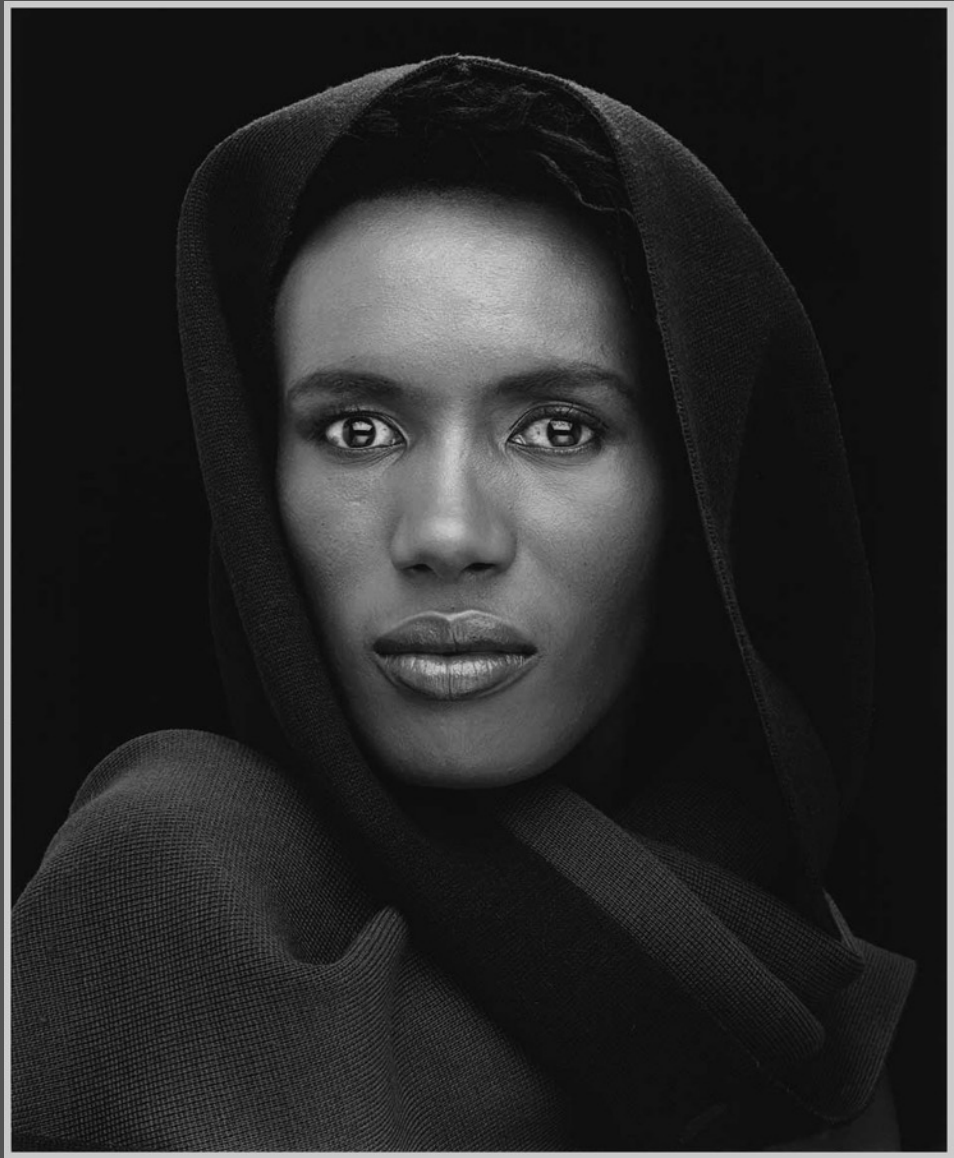
"As a man you're either a love rat or marriage fodder. That's how women see it. I was always the latter"

Diffused Highlight = Diffused Reflection

Specular Highlight = Direct Reflection

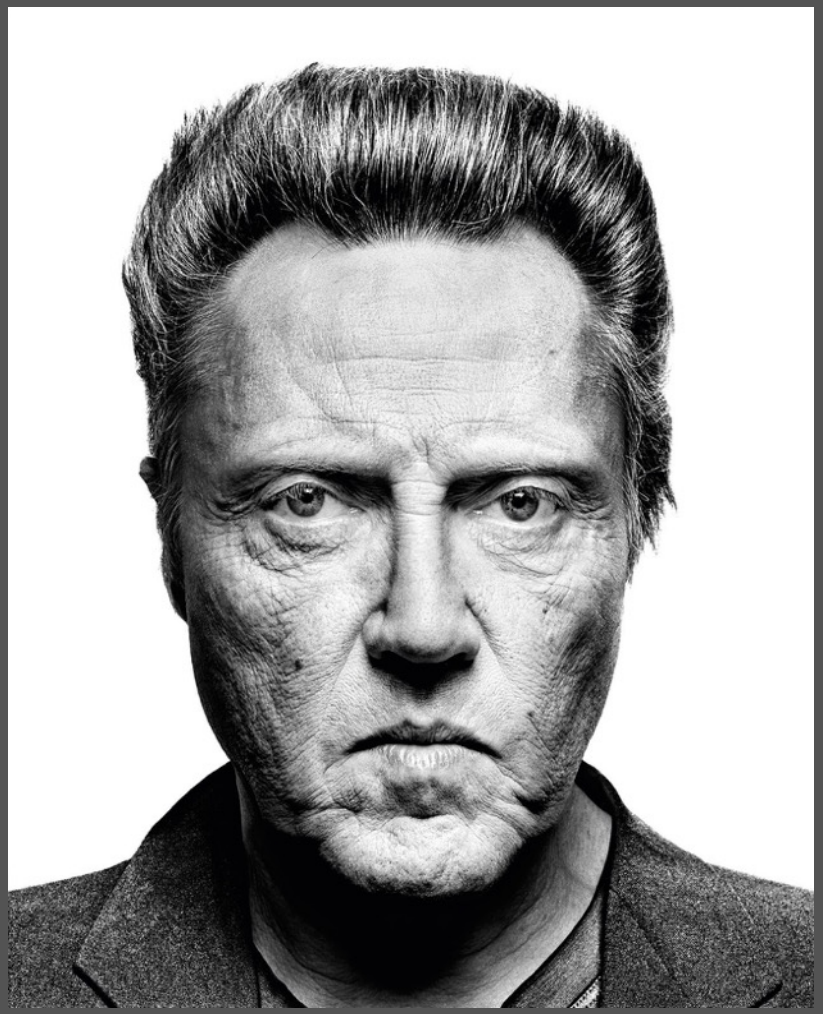
Shadow Area

Diffused Highlight-to-Shadow Transfer Area



Robert Mapplethorpe

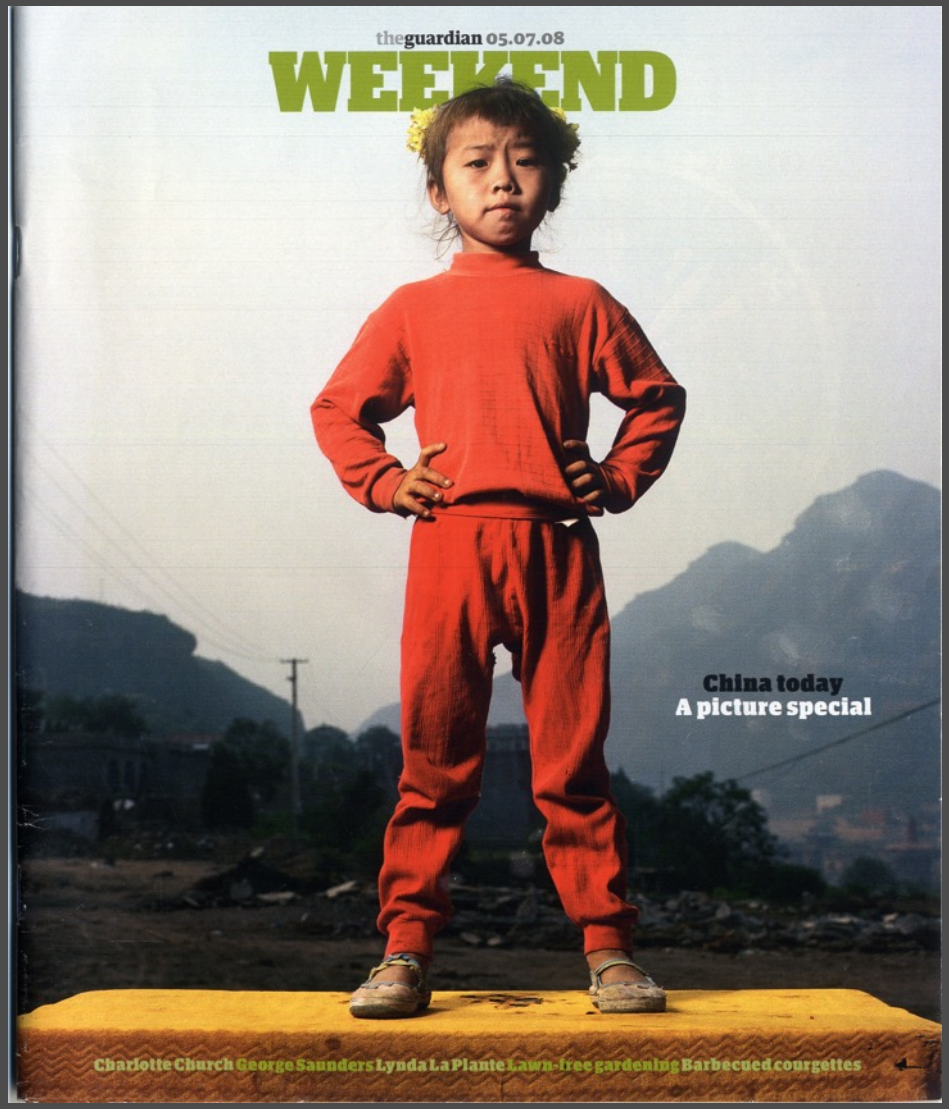
Gregory Heisler



Platon

theguardian 05.07.08

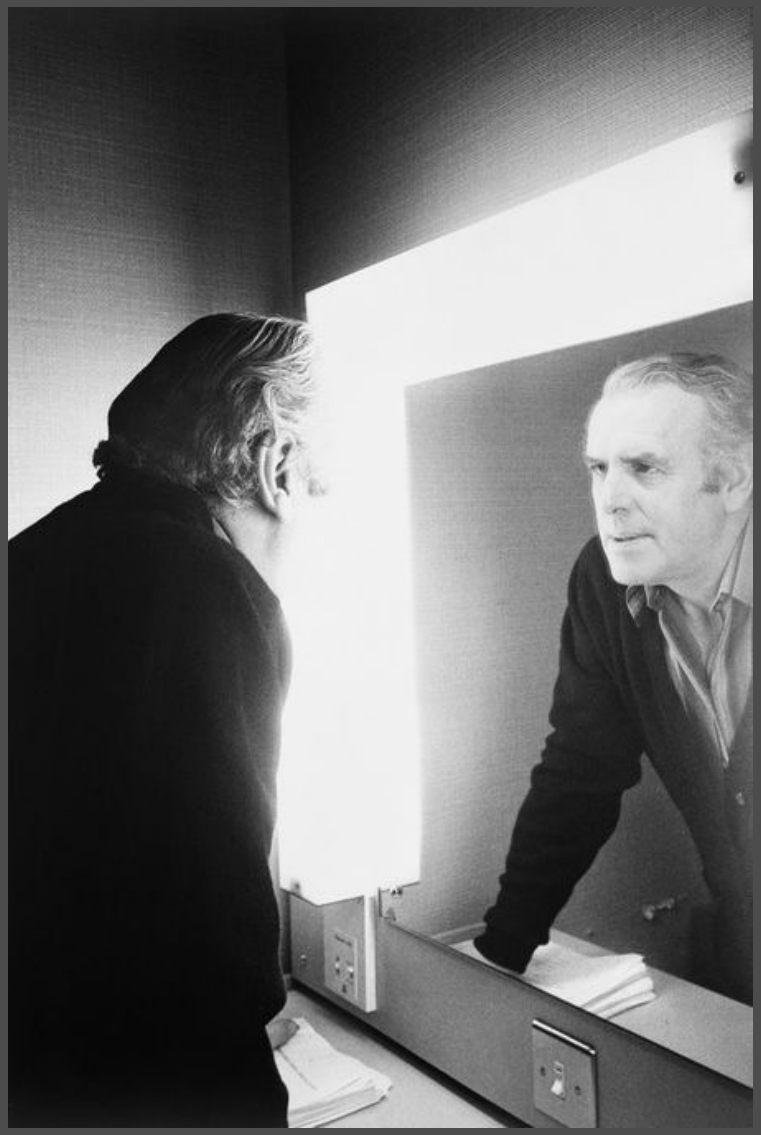
WEEKEND



China today
A picture special

Charlotte Church George Saunders Lynda La Plante Lawn-free gardening Barbecued courgettes

Chen Liqin gathers up chillies left to dry in the flat desert of Gansu province; they will be used in cosmetics



Brian Griffin

Brian Griffin

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Volume 153
Number 7577

Julian Benjamin

Murdo Macleod

Gregory Crewdson

Gregory Crewdson

Martin Parr

Paul Reas

Paul Seawright

Anna Fox

Rineke Dijkstra

Diane Arbus

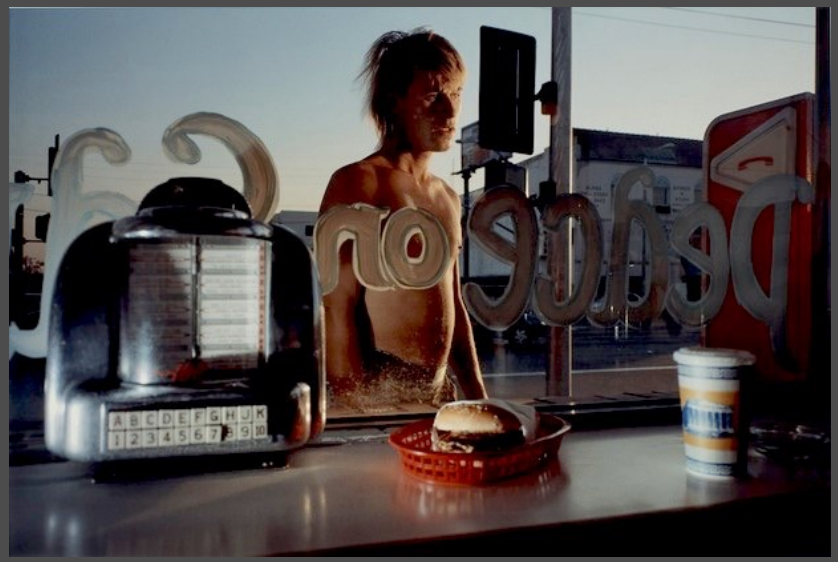
Bruce Gilden

Larry Fink

Dougie Wallace

Dougie Wallace

Richard Billingham

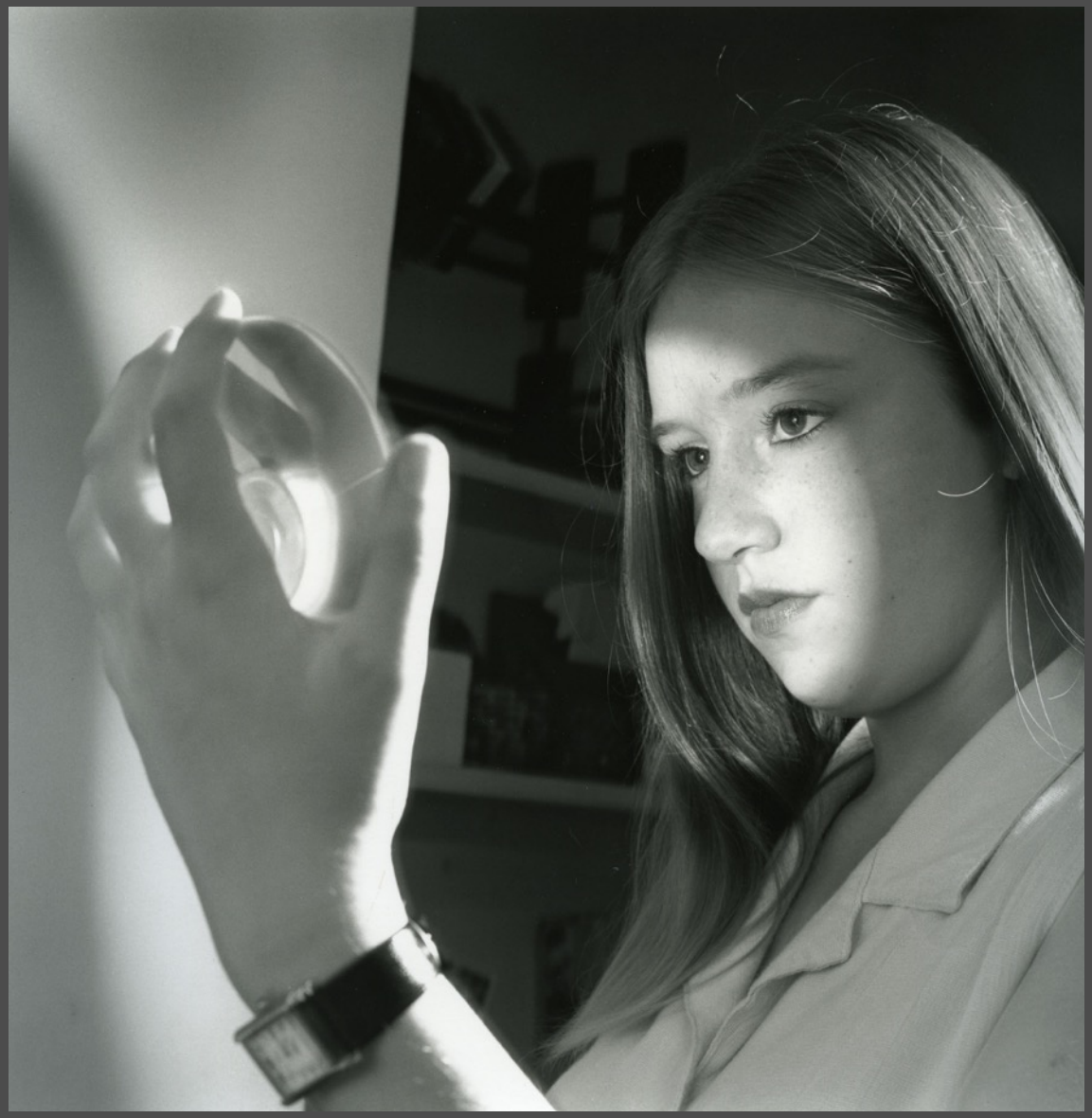


Philip Lorca DiCorcia

Philip Lorca DiCorcia

Philip Lorca DiCorcia

Thomas Ruff



CARLA LANE'S BEAR

Carla Lane, 60, is our foremost female comedy scriptwriter, responsible for The Liver Birds, Butterflies, and Bread.

"I got this little bear, called Mr Bear, when I was 10 years old. He sits in my kitchen and every time I look at him he reminds me of an idyllic country childhood when we played in haystacks and adored nature. My first puppy adopted him and flung him in several ponds so he's a bit battered now. If only the world could be like it was when he was new." S

Carla Lane with her faithful bear that brings back memories of an innocent childhood

PHOTOGRAPHS: MARTIN BLACK; PAUL DUERINCKX; REX; GIL GALVIN

Paul Duerinckx

Dress rehearsal: recovery nurse Cathy Walsh, part of a mobile emergency team from Kent and Sussex Weald NHS Trust, keeps her wits about her during a mock traffic road accident at Tunbridge Wells Fire Station last week

Before

After

A Lighting workbook with detailed notes and diagrams of lighting set-ups, demonstrating an understanding of each session

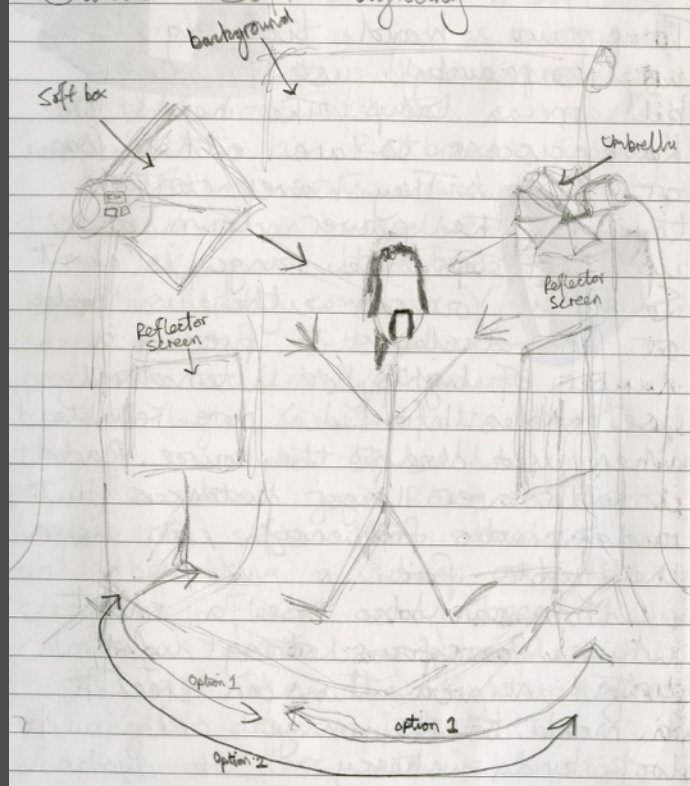
Analyse or ‘reverse-engineer’ a range of found images that use lighting in differing ways

Include at least one of the following in your Lighting book:

A full or 3/4 length studio portrait*
A studio ‘Headshot’*
A lit environmental portrait*
A location portrait with available light (indoor or outdoor)

* Given that there may be a significant demand for location equipment and studio bookings, it may be an idea to work in teams

Studio - Soft lighting



If you want to have soft areas of shadow on one side of the models face you can use one lamp fitted with either a soft box or umbrella. It can be positioned either side of the model. You could also use 2 lamps and set one light at least 2 stops higher or more to achieve directional shadows. If you want to have flat lighting you position the light directly in front of the subject. You should try and use softboxs, and other lamps and reflector screens as close to the model as possible. Also try and angle lamps downwards on a model so that the shadows are less intrusive. Sometimes you get a distracting shadow under the chin, you can use a reflector screen or lower light to get rid of this.

Session Two — Soft lighting

(21/02/2008)

• Notes from second session...

Mostly used — Soft light — flattening — attention to subject as opposed to making a feature of the lighting.

detail — Soft light

controls contrast — Soft light

Links to painting — painting uses natural light eg. concentrated light through a window
- Rembrandt, Vermeer —: Mimics painting

To start, use one light at a time, then ADD. Don't start with lots of lights.

Soft lighting incorporates using - brollies, soft boxes, bouncing, reflecting light.

Umbrellas

Silver — more specular : more reflective, silver brolly is harsher.

White — white brolly is less harsh and slightly less reflective than silver brolly.

Gold — Gold brolly warms the subject.

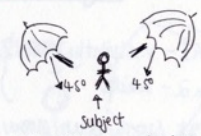
The bigger the umbrella or soft box the better.

The closer to the subject the light is, the softer the light. If the source used for soft box (eg. 1.4m) if the light is brought further away than 1.4m, the light will get harsher.

Usually used just out of shot: the softer you want the light, the nearer you put it to the subject.

Used for fashion and beauty

Thomas Ruff good example of this lighting.



Make sure the lighting is equal either side power wise:

Use the two lights that have the same power

eg. 2 x 500 DX
2 x 1000 DX } easier!

* The lights are put higher than the subject, usually angled at 45 degrees.
* Also, the lighting brollies should be even either side: in terms of position, height and power.

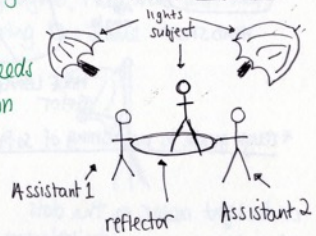
Take a reading off both the lights...

The cell : button to check - take each reading to make sure they are emitting the same amount of light.

eg. fill + 3/10 ths fill + 6/10 ths
= roughly the same readings.

* To make the shot brighter... fill in flash? reflector.

When taking a shot, you'll be able to see if one side needs more - eg. take one light down a few stops if the shot looks uneven.



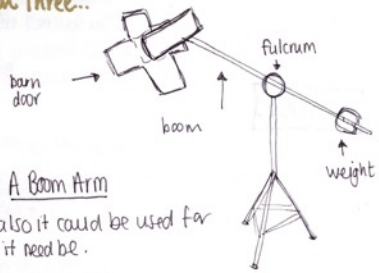
Anna Fox (1961 –)

I first came across Anna Fox's work a few years ago with her body of work titled 'Workstations'. The work was made in a response to life under Margaret Thatcher and focuses on office life in London in the late 1980's. The images (as the one below shows) are very brash and share a similarity with this very distinct documentary style – Martin Parr is another photographer who uses this harsh flash lit saturated colour. In a contrast to the image below, the image above shows how black absorbs the light resulting in a much flatter picture.

Session Three – Hard Lighting

(28/02/2008)

- Notes from Session Three...



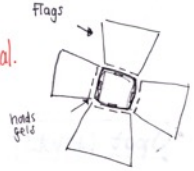
A Boom Arm

used for high lighting, also it could be used for very low level lighting if need be.

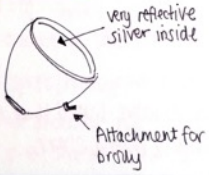
* Light Shapers... Restrict the angle or view of the light...

- **Barn Doors**

These are used to make the light more directional. Quite crude lighting. Used in films as a continuous light source. Red heads come with barn doors as standard.



- **Spill Kill**



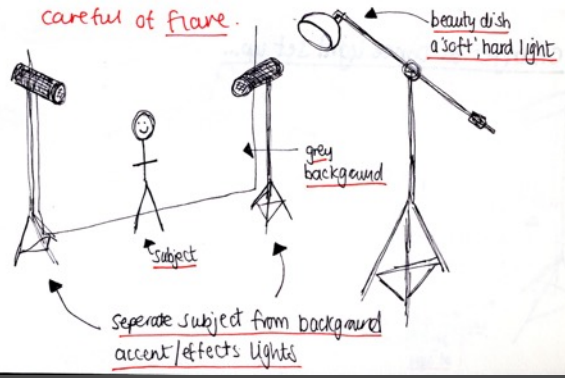
The highly reflective silver inside reflects light to the umbrella. A spill kill is more specular and harsher than a barn door.

* Reasons for altering the three light set up -

The light to the left was moved back and hightened, which made the angle more extreme. This was done to make the light falling on the shoulder brighter, and to highlight the back of the neck and hairline.

This gives the effect of giving more definition to the edge and to seperate the subject from the background.

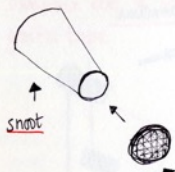
NB. Now that the light has been moved, the light is getting closer to the lens axis: due to this, we need to be careful of flare.



*This is the same set up as before - with the honeycombs etc. By doing this, a clear line is created around the shoulder and t-shirt

As the T-shirt is a really similar colour to the background, the accent lights help to seperate the subject from the background.

• Lighting using a snoot...



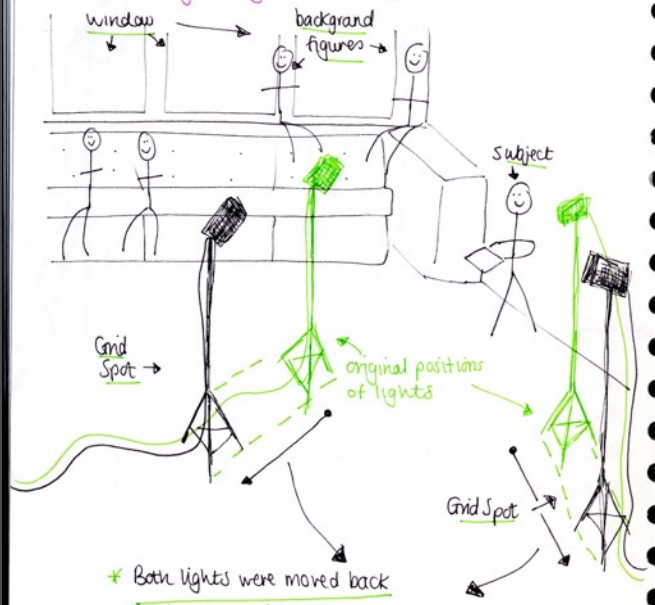
The honeycomb that fits over the snoot, this will direct the light even more closely.

By putting the attachment on, you lose a bit of light again - nearly one stop of light.

When the honeycomb is on the snoot, the light covers a really small area.

Without the honeycomb, the snoot covers quite a small area.

* The next shot was the same set up as before, the only difference being that the lights were moved a bit further away from the models to give a wider coverage of light and a higher contrast.



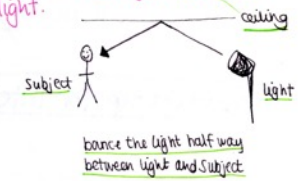
* Both lights were moved back roughly two metres to give a wider coverage of light and also a higher contrast.

NB. The lights are set at 5600 degrees Kelvin. The images could appear green due to the flourescent lights

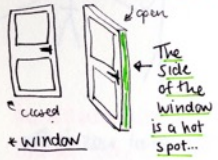
* To get natural looking effects using flash, you would bounce the lights *

Bounce the lights off the ceiling. Use two lights to pretty much cover the whole room.
If you used a spill kill, you may get a harsh light and catch the top of the subject with the light.

→ The angle of incidence and angle of reflection



When bouncing the light, take the grid spot out.
The first shot with the bounced flash was at f11 @ 1/25th sec.
There may be an issue of a hot spot on the corner of the open window – if you get reflections, open the window!



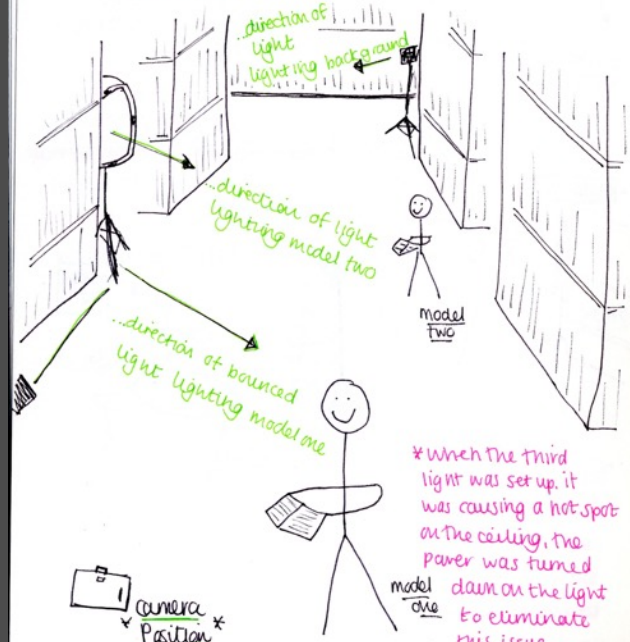
NB: One of the problems with bouncing flash is that there's a tendancey to get a dark shadow under the brow – RACOON / PANDA EYES!

To solve this... Use a reflector

* using a reflector to get rid of Panda eyes...

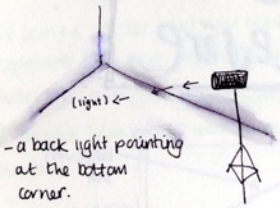
• Using three lights...

To light up the very back of the library which forms the very back of the photograph, a third light should be used, in a similar way to using the soft box to light model two which was coming from the left, the third light will come from the right.



* When the third light was set up, it was causing a hot spot on the ceiling, the power was turned down on the light to eliminate this issue...

* Close up of third light:



- a back light pointing at the bottom corner.

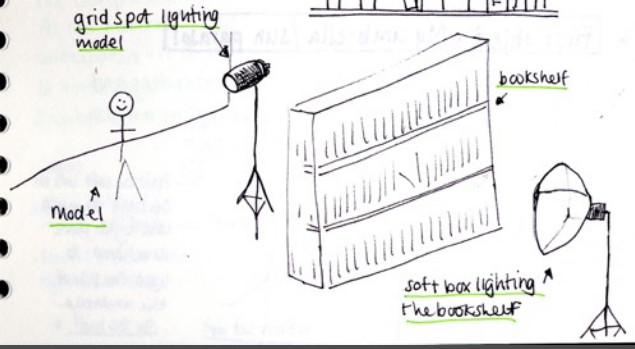
Shot at a 60th sec @ f8.

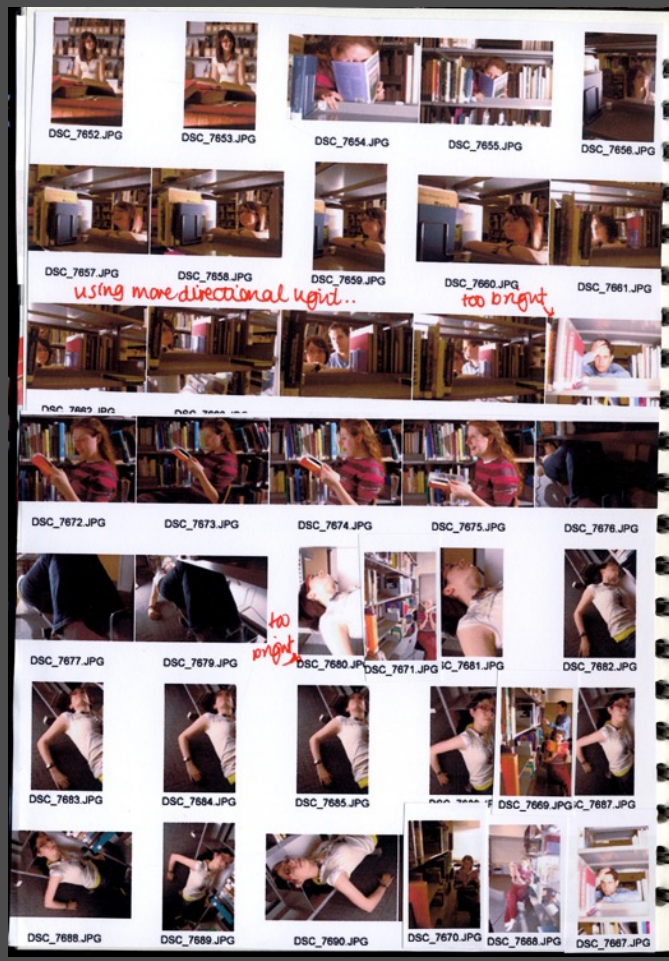
...to reduce the appearance of three pools of light from the three lights, the next shot was taken at a fifth of a second at f8.

• Another set-up in library

This was an alternative shot in the library, another way of doing this would be to use a third light to put behind the model - this would seperate the model from the background... creating greater depth.

* shot taken looking through bookshelf





These were the first experiments with the light - the image above was our first attempt but the light was too bright as my top and the books on the top right of the frame - it was blowing out. The photograph to the left shows our correction of this - we turned the power down which has resulted in a correctly exposed image.

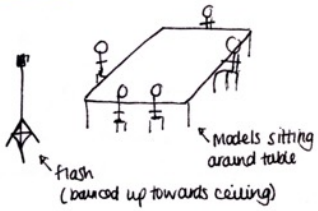
NB: Because flash only has full stop control, it would be better to change the aperture. it will allow a finer change

*If you are only using one light and want fill-in flash...

- Can use windows – get the light coming in. Take an ambient light reading eg f8. make sure ambient shutter speed is f11 – get one stop fill in from window light.

- **5 people sitting around table**

Bounce light up to ceiling. Change zoom setting to 35mm. Zooming – increasing the intensity of the flash.



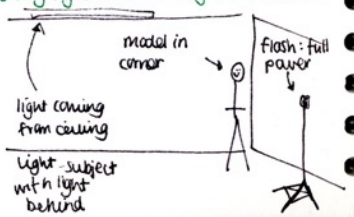
* Inverse Square Law *

move light around.

same with this.

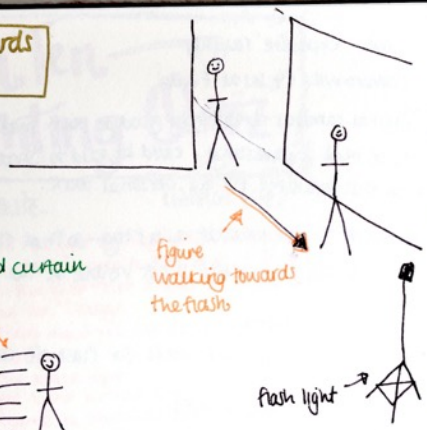
* f16 1/5mtec.

To avoid shadow under chin and eyes, use flash on camera. Use TTL flash for light on camera. If too bright, can used 'flash exposure compensation'. Like in the studio where we experimented with Key lights and fill lights – it's the



- **walking towards flash...**

Figure walking towards flash on first curtain synchronisation. Now do it on second curtain synchronisation.



*1st curtain Sync. *2nd curtain Sync.

- **Open flash** (another off camera flash technique)

Setting camera up in a dark space. (Pauls Vetch Pictures the interior space)

Reciprocity failure... The film's sensitivity decreases the longer the exposure – varies from film to film. To overcome this problem, you'd just bracket it – vary time eg. try 10sec, 20sec, 40sec } double time

* The same things happen with open flash – work out how many

f4	–	1 flash exp.
f5.6	–	2 "
f8	–	4 "
f16	–	8 "
f22	–	16 "

double ↓

flash dominated image

mix of available & flash light

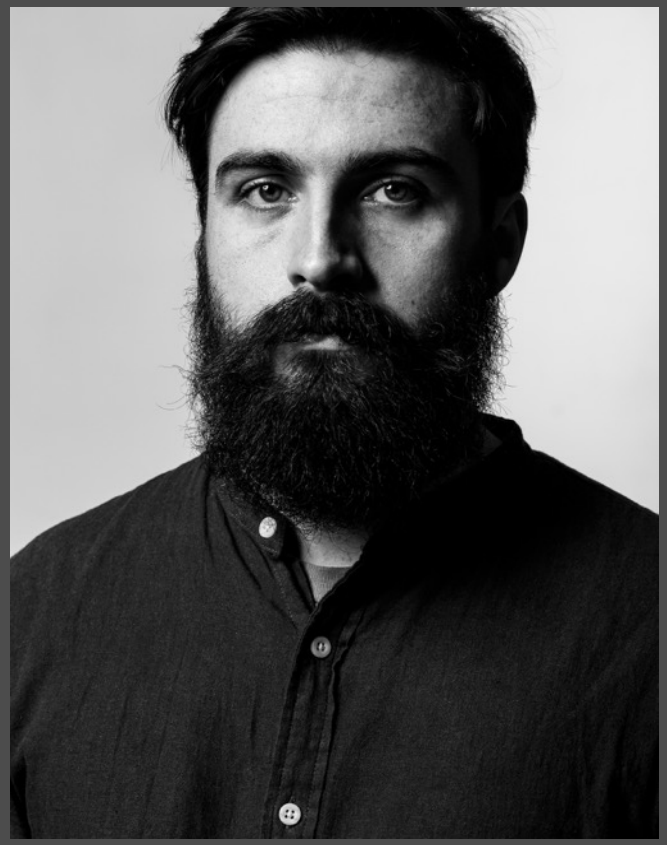
mix of available & flash light

Increased flash power to cover wider area

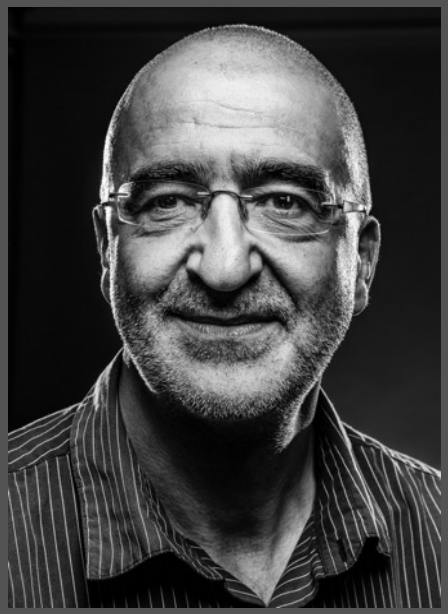
hard lighting

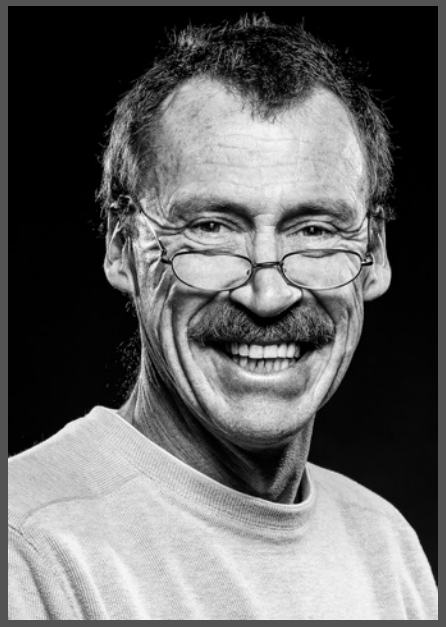
hard lighting

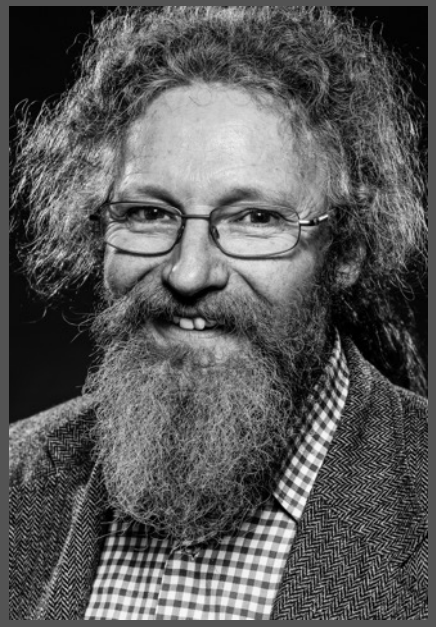
hard lighting



HOTEL
THE BUZZING
MACHINE







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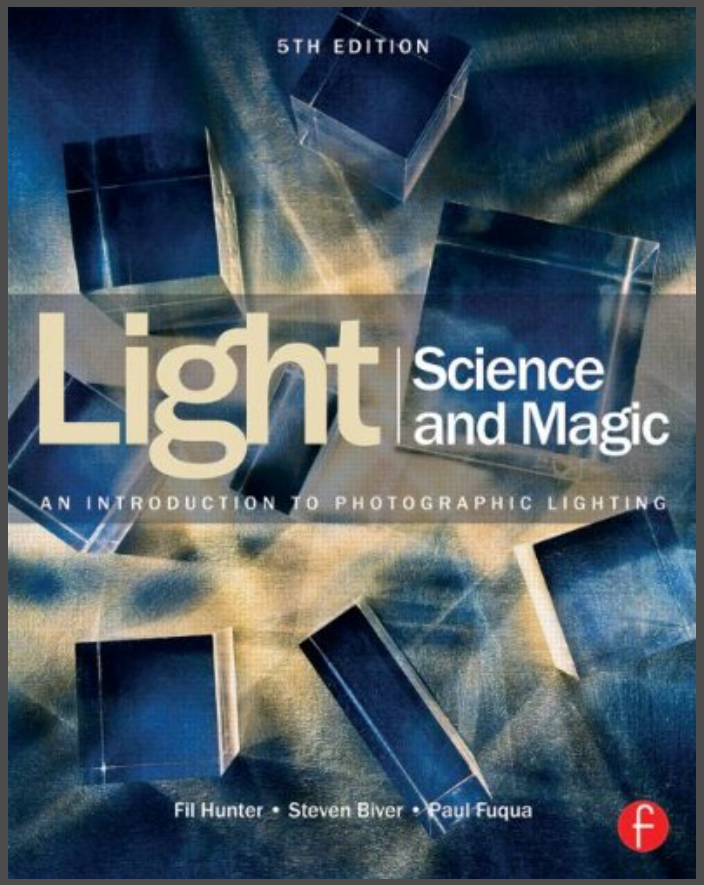
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