

Lighting for portraiture- without studio lights

For Burghfield Camera Club 21.03.19

Mary Auckland ARPS

Lighting for portraiture- without studio lights

- referring to *interior* portraiture, but these lighting set-ups can be applied to still life and other interior lighting situations
- interior only; not taking into consideration brighter ambient light eg. if exterior

Two things we need to remind ourselves of when considering flash use

- cameras cannot capture the range of light our eyes can adjust to
- flash only lights one thing at a time, unlike the natural light we are used to

Camera settings

- *programme/auto mode* will set camera to wide aperture and slowish shutter speed eg 1/60 at f/4 (beware movement) ISO 400
- know your max *synchronisation shutter speeds* (usually \pm 1/200, 1/250) if in bright light, backlit (& how you can change them if needed)
- know your min. hand-hold *shutter speed* (& allow for subject mvt.): the flash will freeze the subject mvt. but may get some blurring from ambient light
- use your *ISO* to help achieve the aperture & shutter speed

Shutter speed not synchronised -
so shutter appears in photo



Camera settings

always check

- your *settings* (most common error I make is to leave settings from previous shoot!)
- wait for *recharge symbol* before firing again (confirmation light on back of flashgun and/or flash symbol in viewfinder)
- your *distance measurement* (probably displayed on flash so you don't have to do the maths):

alternatively

guide number/aperture = distance

eg. $58/5.6 = 10.3\text{m}$ 100mm at 100 ISO

if in doubt take a test shot

Flash settings

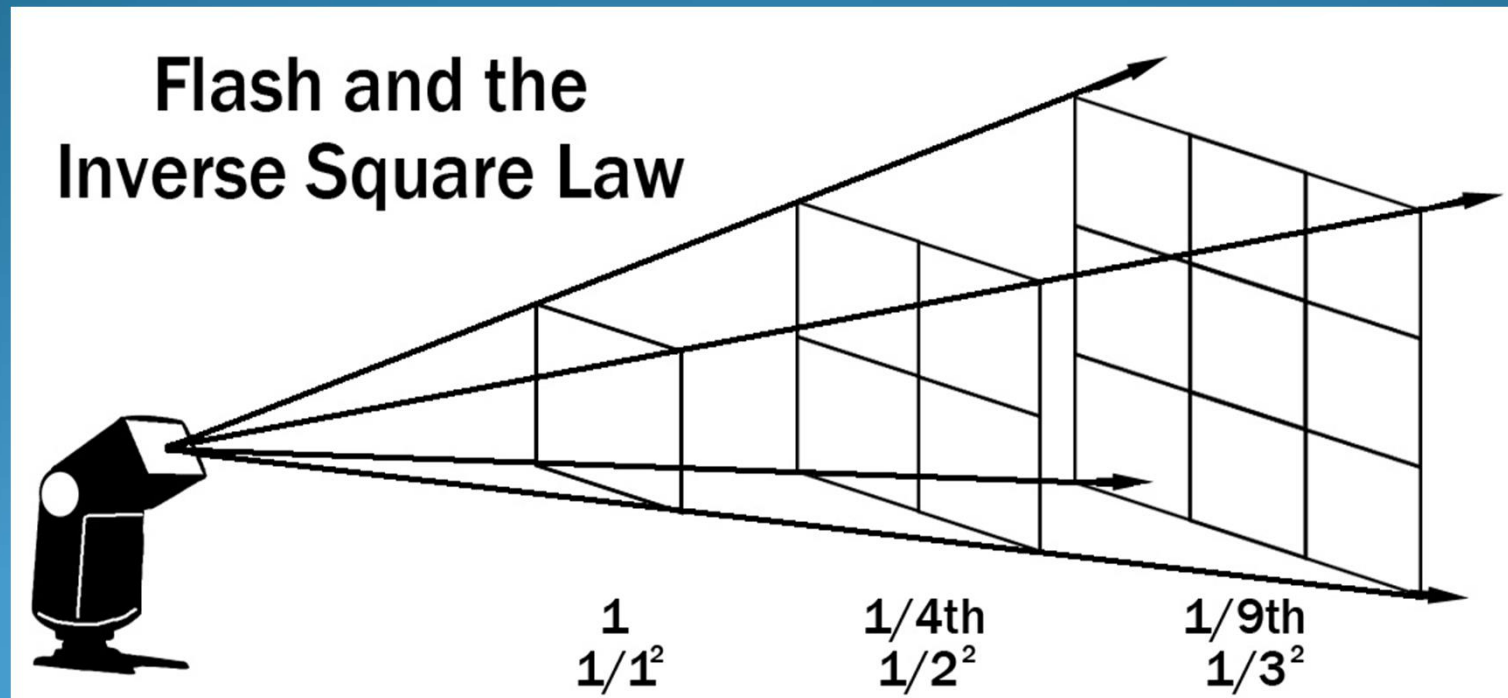
- most flashguns have auto zoom (only have to set wide-angle, using the panel, on the flash)
- use ETTL = evaluative through the lens (metering)
- with many cameras you can set the flash on the camera

The technical bit

Flash follows the *inverse square law*

i.e. if you double the distance (flash to subject) you

- quarter the power
- quadruple the spread



Hard  Soft

Full-on flash on camera -

direct flash

dem

- focus on the eyes; or nearest eye

critique

Full-on flash on camera

Background is close -
if background further
away goes dark (flash
doesn't reach it; but
will lose shadow)



On camera or pop-up flash

- flat - no modelling
- often harsh
- risk of hood shadow
- risk of red eye
- risk of shadow/s on background

Red eye reduction

- shorter focal length (below ± 150 mm)
- diffuser or reflector
- pre flash (or take another as soon as recharged)
- flash off camera
- more ambient light
- no alcohol !!
- no babies under 12 weeks (lack pupil reflexes)

Posture

- avoid 'convict 99'
- stool elongates - less 'slouching'

Background

- plain wall or curtains (neutral)
- dark background may cause flash to over expose (and vice versa)
- cloth/paper roll draped from curtain rail
- if background long way off will go dark (as flash not reaching it) interiors

Bounce flash

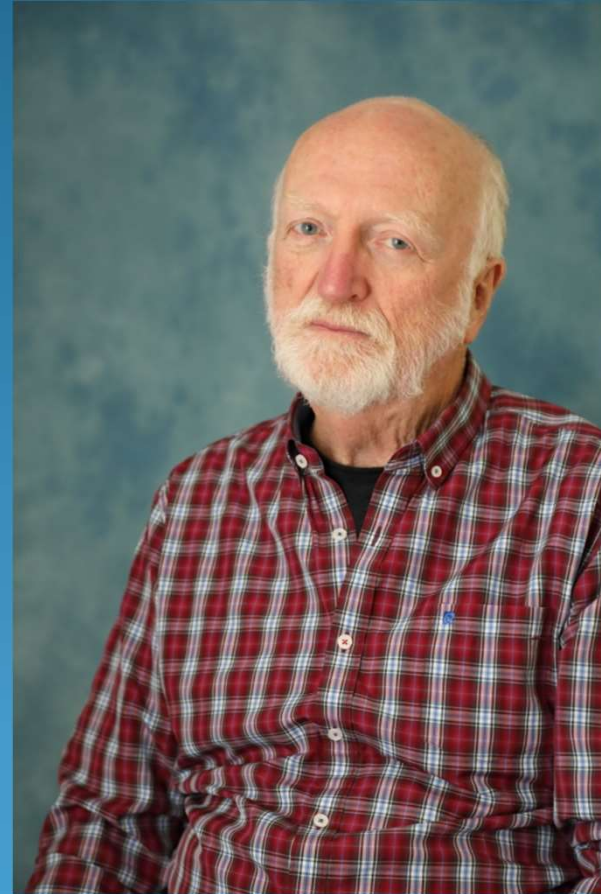
Dem:

- 1 ceiling
- 2 wall or reflector, umbrella etc

Bounce flash



Bounce flash ceiling



Bounce flash wall

Bounce flash

- spreads (more light in shadows/around image)
- uses more power as needs more light (up to 75% lost) slower recharge
- appears softer, more flattering
- bounce off ceiling if lowish (max 2-2.5 m) & white
- guess the angle! $\pm 90^\circ$
- beware beams coloured ceilings/walls (Canon recommend AWB)
- light on back of flash tells you if adequate illumination

(can produce heavy under nose or under chin shadows - then needs reflector)

Bounce flash

Dem

Bounce flash with built in 'catchlight' or reflector

Bounce flash



Bounce flash with
built in
catchlight/reflector

Bounce flash

- bounce plus built-in reflector, (or added reflector) throws some light forward 90°
- needs powerful flash (halves flash power)
- uses more power (rechargeable batteries Ni-MH, higher energy)
- need to check distance (but not displayed if bounce)

(guide number/aperture = distance)



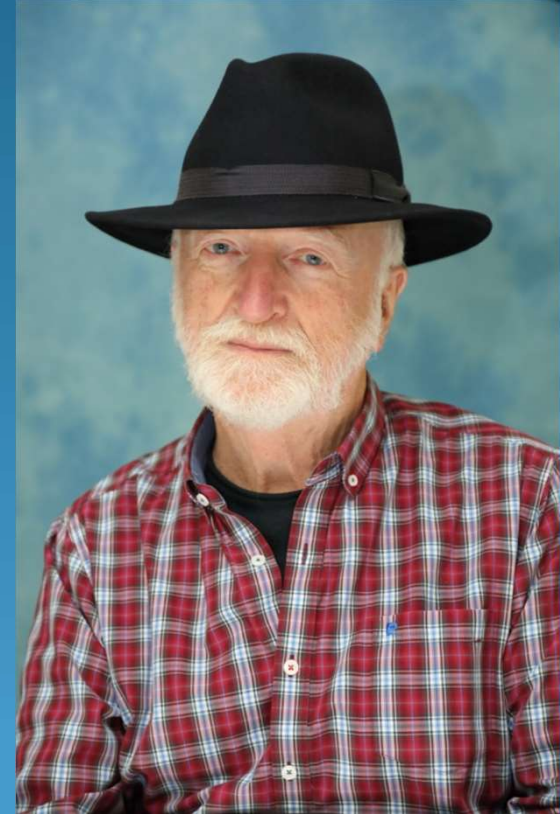
Bounce flash- hat rim



no reflector



white reflector



silver reflector

Diffuser (filtered) flash (on camera)

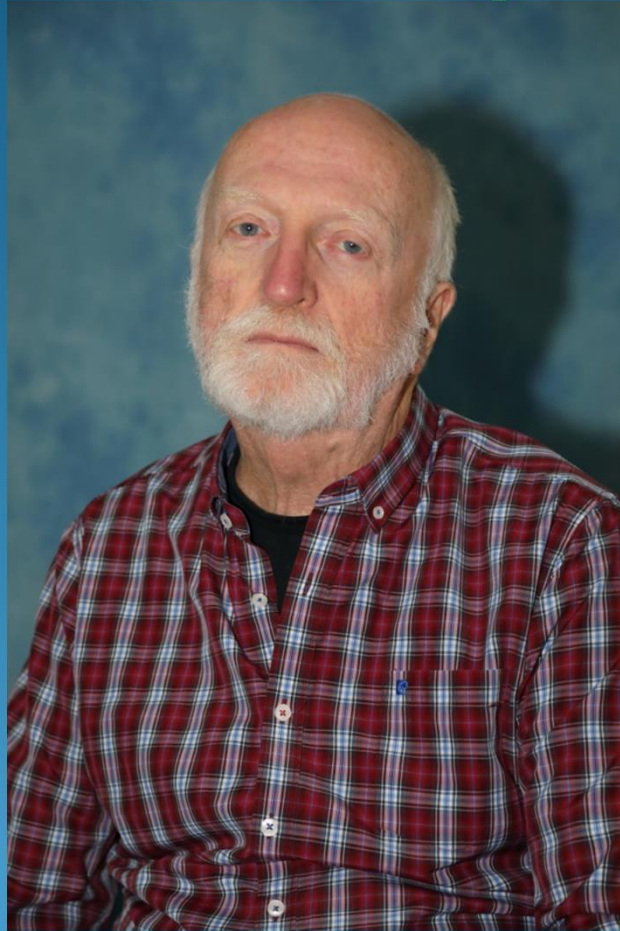
Dem

nb head should be at 45°

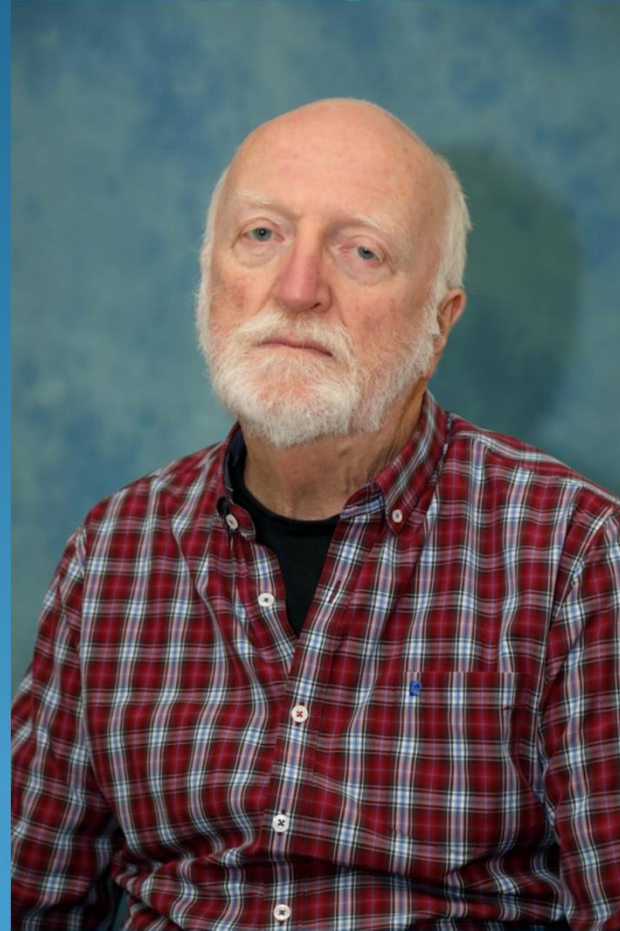
Bottom of plastic milk bottle works
but lose light ++



Diffuser (filtered) flash



diffused flash
direct ISO 400



diffused flash ISO
1600

Diffuser (filtered) flash

- need powerful flash
- lose 2 -3 stops
- should be 45° (or 60°) upwards
- spreads the light (may help light other than subject)
- appears 'softer'
- eg. omni bounce, tissue paper, umbrella etc.
- take test shot and see if confirmation light comes on (up ISO if necessary)
- (probably not more than 10m away)
- can use diffuser bounce if powerful flash



Getting the flash off camera

- flex
- using on-camera flash or pop-up flash as master, to fire another slave flash gun
- trigger system
- attaching flash to tripod /other

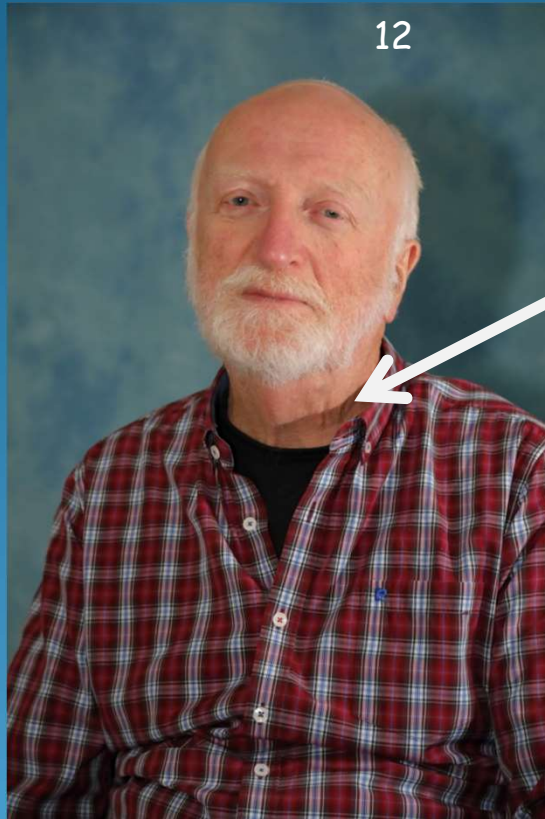


Off-camera flash

Dem: master & slave flashes
(can use pop-up flash to fire a flashgun)

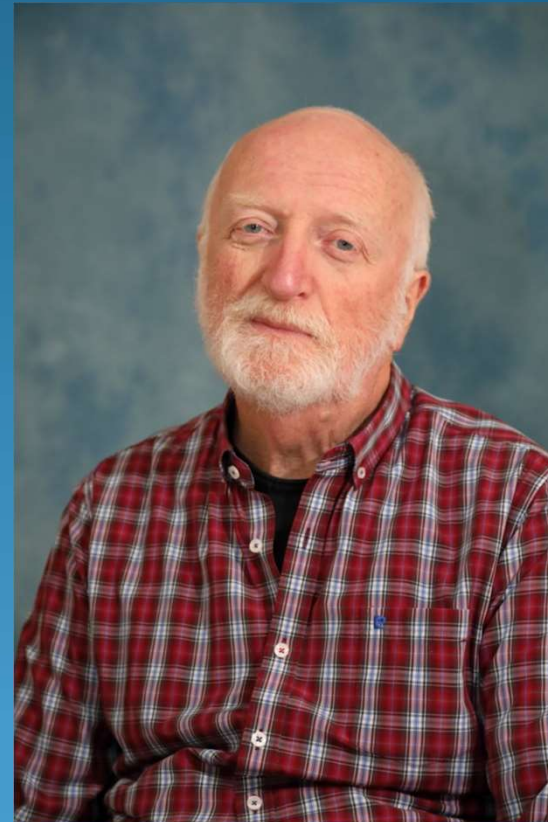
Off-camera flash

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master diffuser
bounce, slave
diffuser

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master diffuser
bounce, slave
diffuser, ISO 3200

Off-camera flash

- on camera as master
- 2nd flash as slave
- unlike studio lights - not able to see what going to get

(some modern flashes do have a type of modelling light)

Unable to get flash off-camera

use

- natural/window light
- lamp light
- video or continuous light source



Reflectors

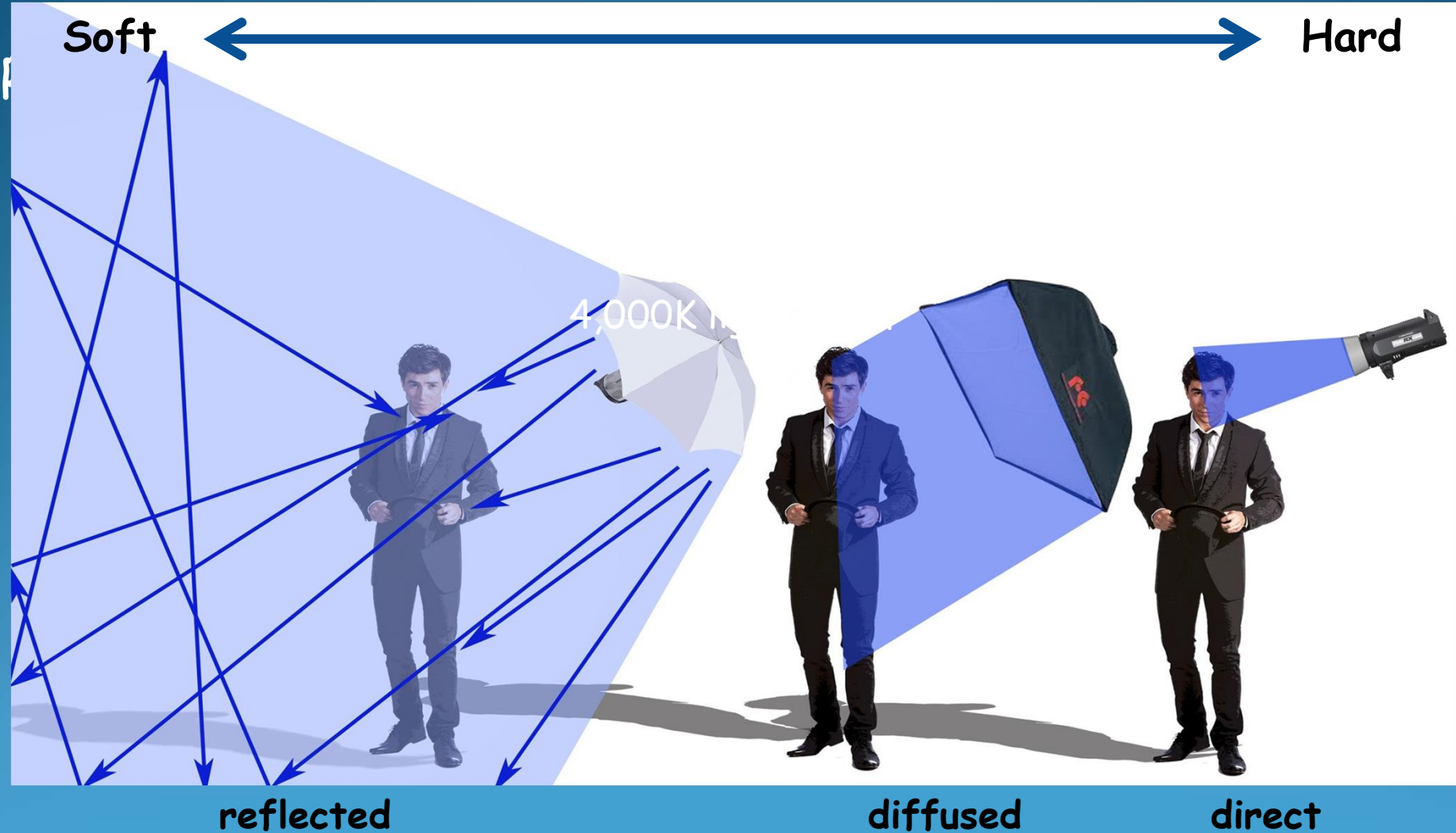
You can buy something fancy but you can also use

- white card
- kitchen foil on card, turkey roasting tray
- a mirror

basically anything reflective

It is like having an extra light.

Difference between direct flash and diffused or reflected flash/light



Reflectors

Dem

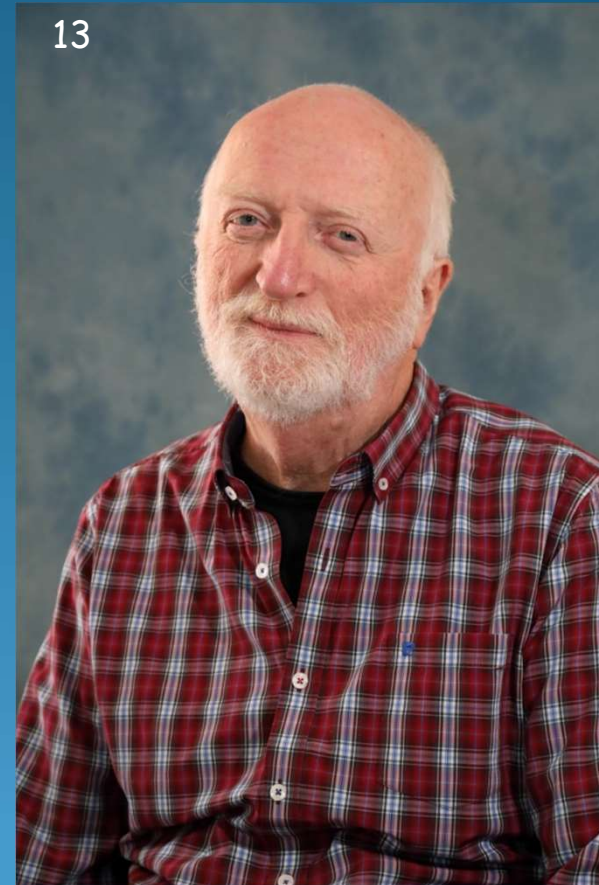
Cheap and surprisingly effective

- *master*
- *slave and reflector*

Reflectors

- *master*
- *slave and reflector*

(reflector too close, bright R. cheek)



master diffuser bounce,
slave diffuser, ISO
3200 ,plus reflector

Lamp light

nb the lamp used here is 'daylight temperature' (actually 6400K) and reasonably bright

so.... similar temperature to light from a window, which is the inexpensive bright option (but avoid sunlight actually shining in through the window on to the subject)

Lamp light

Dem

1. lamplight - 'split' lighting
2. Lamplight, reflector and up ISO

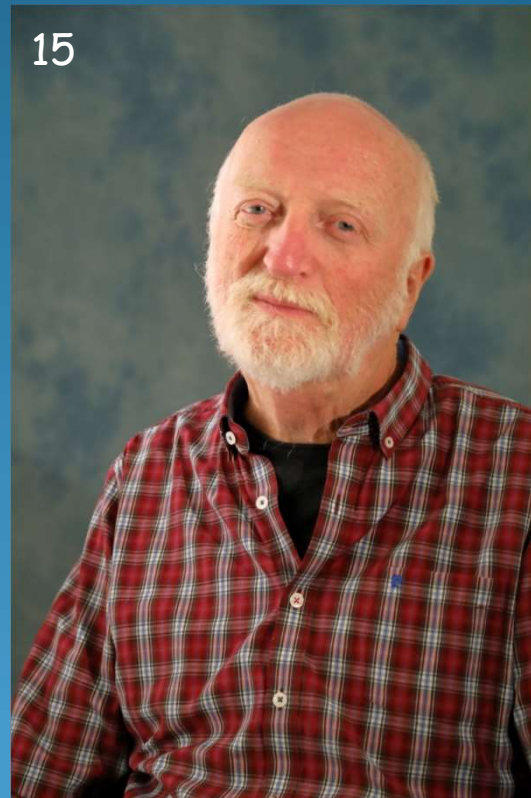
Lamp light

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lamp light side
(split)

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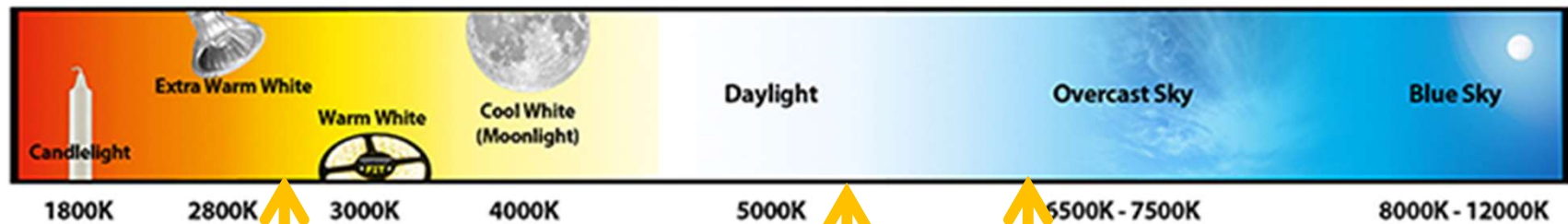
lamp light side (split)
plus silver reflector
ISO 1600

Lamp light

- with or without reflector
- with or without fill flash
- can get daylight temperature lamps and bulbs
- alternatively tungsten lamp and tungsten filter for flash - shoot in tungsten light balance; BUT modern AWB often copes well

Colour temperature

Colour Temperature Chart



Tungsten
lamp

flash

My 'daylight'
lamp

Lamp light

- often easier than flash, because *'what you see is what you get'*
- likely to be tungsten (yellow - higher kelvin) although more 'whiter' lights available now
- weaker than flash
- if tungsten, adjust light balance (or see if camera makes the adjustment for you with AWB - ambient light)

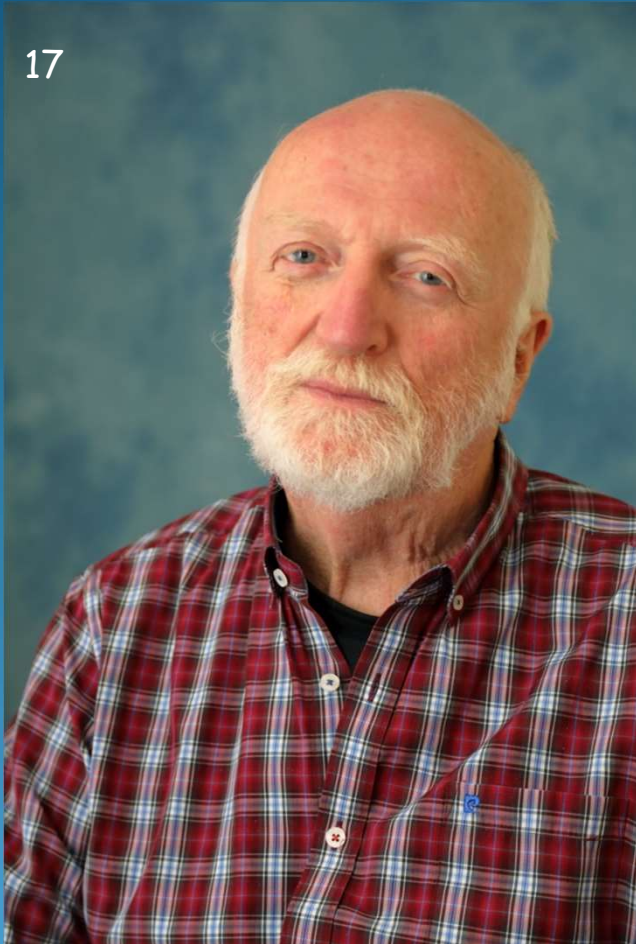
Mixed lighting

Dem:

- master bounce diffuser
- lamp
- plus reflector

Mixed lighting

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any combination, with
equipment you have, to
get the look you want

master bounce diffuser, lamp, plus reflector

Practical

Group into small groups(?5) taking turn-about (model, photographer, reflector holder, lamp holder etc) and try out the following portrait light settings:

(suggest not trying slave because will interfere with each others flashes !)

1. bounce flash
2. filtered flash
3. lamp: 30° - 40° to subject
4. lamp: 30° - 40° plus reflector (white vs silver)

Lamp

The lamp used here:

(however has doubled in price since I bought it!! so do look for others)

Kenley Natural Daylight Floor Lamp (12W)
LED Dimmable Energy Saving Bulb -
Adjustable Gooseneck Arm

colour temperature of 6400K but doesn't need to be that high

https://www.amazon.co.uk/gp/product/B07956JRFZ/ref=ppx_yo_dt_b_asin_title_o07_o00_s00?ie=UTF8&psc=1