

Photography Talk / Demo - April 2006 - AWSA

Objective

- To understand why some photos you see may seem better than your own
- To learn how to use them to learn to take better photos of your own

(Not how to work your camera or which camera you should buy)

photo = light ...graphy = writing / drawing

so photography = drawing with light.

(No reference to cameras. Just a necessary evil used to record what the light showing us.)

This is *semantics* - can be a help to understanding -

While on semantics discuss **Bright vs Dim & Hard vs Soft**. Graph them and **plot examples**.

(Scattergram) eg Sunlight, cloudy day, full moon, candle, "lampshaded" light close up, bare quartz halogen bulb, camera flash, torch

Why worry bright/dim?

Exposure - Two components (boreies on the braai = Function of time, intensity of fire)

1. *Time = Shutter speed* (movement of subject - irrelevant in this case) or camera shake - possibly problematical.

2. *Aperture = Intensity* Aperture = lens opening, affects *Depth of Field* - How much of subject appears to be acceptably sharp and how well your lens will function. Low f numbers = big aperture and short depth of field. Whether good or bad depends on what you want.

Also

3. *Film sensitivity (speed)* or in case of digital camera electronic noise (cf. amp at high volume sometimes "hisses"). Random noise, not related to image, averages out at 0 but causes loss of purity of signal.

4. *Cost vs Convenience vs Heat.* **N F L** No free lunch. Ever.

Why bother with *soft/hard*?

1. Shape and nature of shadow cast by light source
2. Shows (or hides!) surface texture
3. Size and appearance of reflection
4. Apparent volume / 3-dimensional feel / mass / solidity

The influence lighting has on shadows is easiest way of testing how soft / hard a light source is. (Try using your hand.)

What's wrong with the flash built in to my camera?

Easy answer is "Nothing if it flashes. "

But

- Difficult for user to imagine (pre-visualise) what photo will look like till see result
- Too close to lens to give much impression of 3 dimensional shape or volume
- Any reflection of the light source from the subject will be strong, centred and very distracting.
- Shadows will be just "off-register" with the subject, sharp-edged and again very distracting.
- Results usually very different to what we envisage at time of shooting. Very artificial.
Why?

We "see" with ambient light but shoot with short duration flash that we don't see till we get the result. (If want to pre-visualise how appropriate a built-in flash is, work in the dark, and look through the viewfinder with a torch very close to the lens aimed at the subject. Look at the subject through the camera. Chances are you won't be too impressed with the results.

Inverse square law (independent of flash power.) Rapid fall off - made worse with close working ranges, wide angle lenses.

Two strengths of flash units? - Freeze subject movement and camera shake. No need to freeze subject motion (even with green wood) & shouldn't be any need to freeze camera shake.

Big problem with built-in flash is that it's just so handy and in many cases camera owners don't appreciate what alternatives there are. (Bit like playing a round of golf blindfold with no score card till the game's over.)

Check how to switch off the flash on your camera if you're not sure. (Cover with aluminium foil if all else fails!)

Well known S.A. photographer David Goldblatt was asked - "Do you ever use available light? (ie light that he'd *not* added)

His answer - "Always - Whatever's available. Tungsten, daylight, flash, studio lighting, moonlight..."

Good answer. So use whatever *you* have available, *but get to understand it and make it work for you, rather than against you.*

Alternative to flash?

1. CAMERA SUPPORT plus
2. VIRTUALLY ANY TYPE OF LIGHT that *stays on* and that is bright enough for you to *work by* and under which your camera will function.

Since subject is static, only need to worry about camera shake. Easy to eliminate, but if buying a **tripod**, buy a decent one. (Manfrotto - Orms)

Much cheaper alternative is **rice bag**, but make a plan to vary support height easily and securely.

2. Likely practical light sources include **daylight, quartz halogen, tungsten.**

Single light source

K I S S = Keep It Simple Stupid - Single light an excellent starting point.

Quite possible to get a good result with one light. Play with it. Even with single light, can use **white expanded polystyrene foam panels** to create fill or reflection from opposing sides. If using daylight, same applies but have to be prepared to "co-operate with the ungovernable".

Suggested set-up order

Firstly, find a **suitable background**. Discreet non-intrusive colour / texture. Usually want attention on subject. (Infinity curve). Make it oversize. Be generous. Cardboard, art paper, cloth (un-wrinkled) vinyl, plastic, thin ply, whiteboard, left over Formica, perspex. Needs to be cheap (or scrounged) flexible and preferably not too reflective or glossy. Colour up to you. Consider what will work with subject.

Secondly, position the subject at approximately correct angle of rotation w.r.t. camera. Consider features, grain, inclusions, patterns, faults, symmetry, etc. (exclude areas you'd rather *not* show.)

Look at subject from different heights. Then work out how you're going to get your camera to the best position you've found - securely supported.

Fill the viewfinder with your subject, or for effect, even just a portion of it. Eye has a habit of flattering us. (Selective vision. Focus spot. Lions in the game reserve.)

Then and only then start lighting.

Good starting point for a first or single light source is *above and to one side* of the lens axis. Move it from there. Evaluate suitability of light position relative to subject *from camera*. *Not from where you happen to be standing, which is probably next to the light support.*

Can change nature (softness and intensity) of any light by

Softening i.e. *Diffusing* it (tracing paper / tracing film / opal perspex or bouncing it off sheets of white Sagex (i.e. expanded polystyrene) or waiting for a cloudy day.

or (less easily) *Hardening* it eg slide projector). (NB *Increasing distance of light source* from subject *reduces the intensity* but *increases the hardness*.)

(Flourescent (or energy-saving) light sources not so good since usually missing bits of spectrum. Not obvious. Eyes accommodate it, but not film. Can filter to a degree, but try to

avoid if colour accuracy important. Digital cameras seem more tolerant towards fluorescent lights)

RTFM = "Read The Fine Manual".

Learn to know what your camera can do. What it can't. How to work it. How to get the best from it. If you don't understand, try a different book. If you still don't understand, ask.

Be realistic. Know your camera's limitations (and your own.)

Believe it or not, all important camera controls broken down to adjusting shutter speed, aperture, focus That is it. Many modern cameras suffer from "Icon-itis". Learn what needs to change. (No human brain included with any camera!)

Two or more light sources?

Set them up one at a time. Start with main light source. Key light. Usually hard-ish. Position. Evaluate suitability of position from camera. (Even if look over top rather than through the lens) Critical.

Once satisfied with first light, add a lower power, more diffused light often on opposite side of subject to fill shadows, light up dark side of subject, or provide rim lighting,

Then see if need more reflectors or light sources. Don't ignore possibility of adding a reflector below the level of the piece to fill shadow of the lower part.

Divide and rule. Do it in stages and experiment, record, persevere.

Making your light source your only light source is a big help if doing it indoors. (Work at night / work in windowless garage or tape black garbage bags over windows. Make a plan.)

Remember with highly reflective subjects one sees the reflection of any light source. Not the

“beam” that hits the subject. So light whatever’s being reflected, not the subject.

If using digital, use the playback feature to evaluate results. Zoom in. Infinitely better if can see on PC screen as scale is much bigger.

Wotchouwonnitfor?

Purely a record shot?

Reminder of how it was turned?

Club newsletter?

Turning or international art mag?

(Be realistic)

Sources and Resources

- Photography in turning magazines. Analyse why you enjoy (or not) (Angles, lighting, texture, camera position, backgrounds,)
- Specialist books (eg “Beneath the Bark” and “500 Wooden Bowls”)
- Photo books on related disciplines eg ceramics, glassware, archeology, design
- Club library
- Internet (especially www.dpreview.com for up-to-date in depth authoritative digital camera reviews)
- Public Libraries