

VV033
PHOTOGRAPHY
FUNDAMENTALS
(Light and Surfaces)

Session 4
LIGHT / STILL LIFE

Mgr. et MgA. Veronika Lukášová, Ph.D.

Light is a form of electromagnetic radiation. Electromagnetic radiation has a very wide range for Gamma rays (X-ray) small waves to large waves such as Radio waves.

WHAT IS

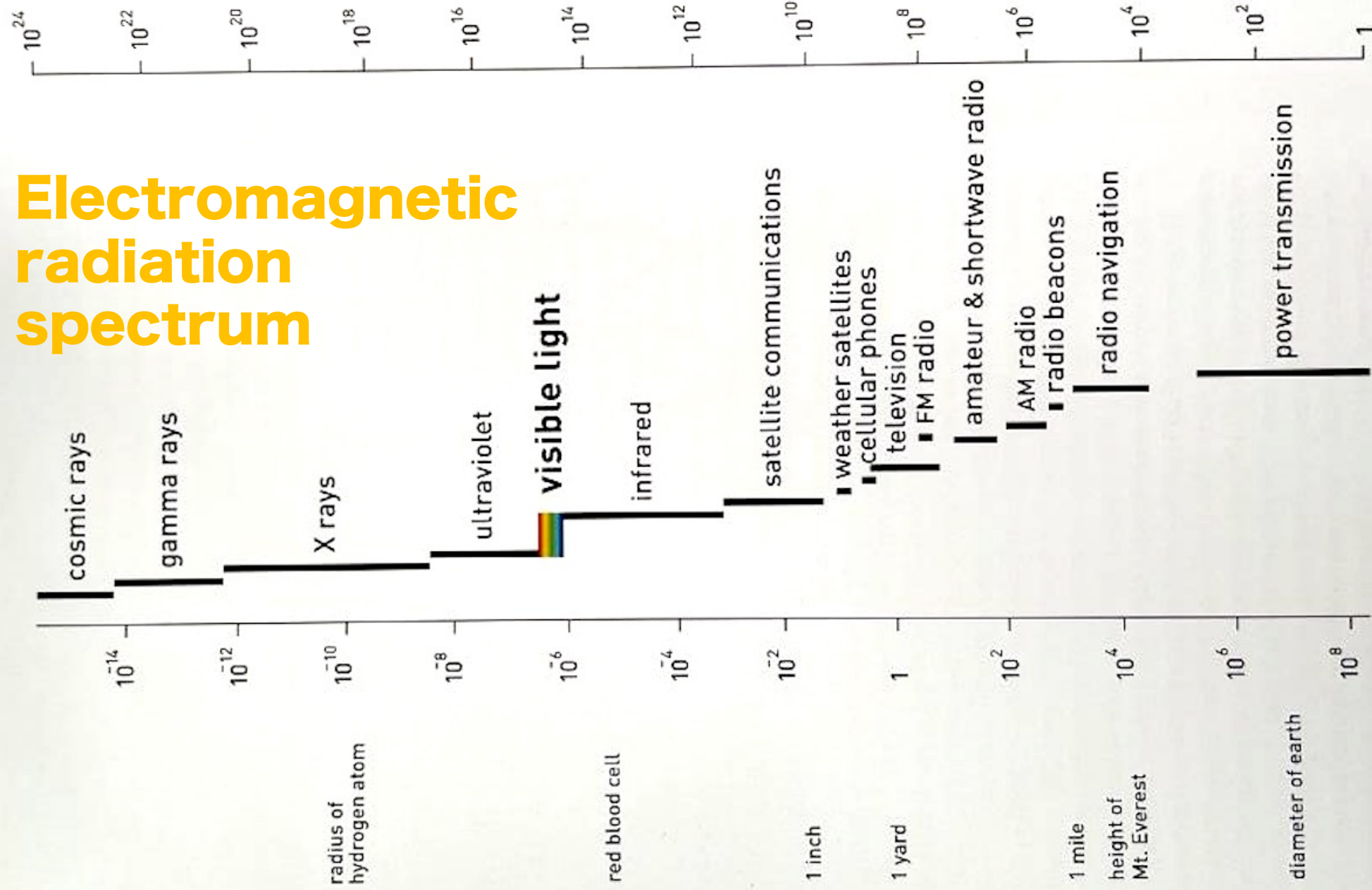
LIGHT

?

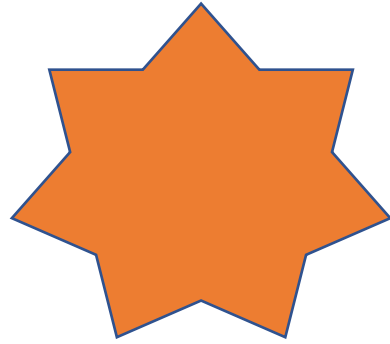
Only small band of the electromagnetic radiation that we call a visible light can be detected by a human eye. Other parts of the spectrum can be captured by specialized equipment f.e. infrared film, cloud chamber, Geiger counter etc.

ELECTROMAGNETIC SPECTRUM

Electromagnetic radiation spectrum



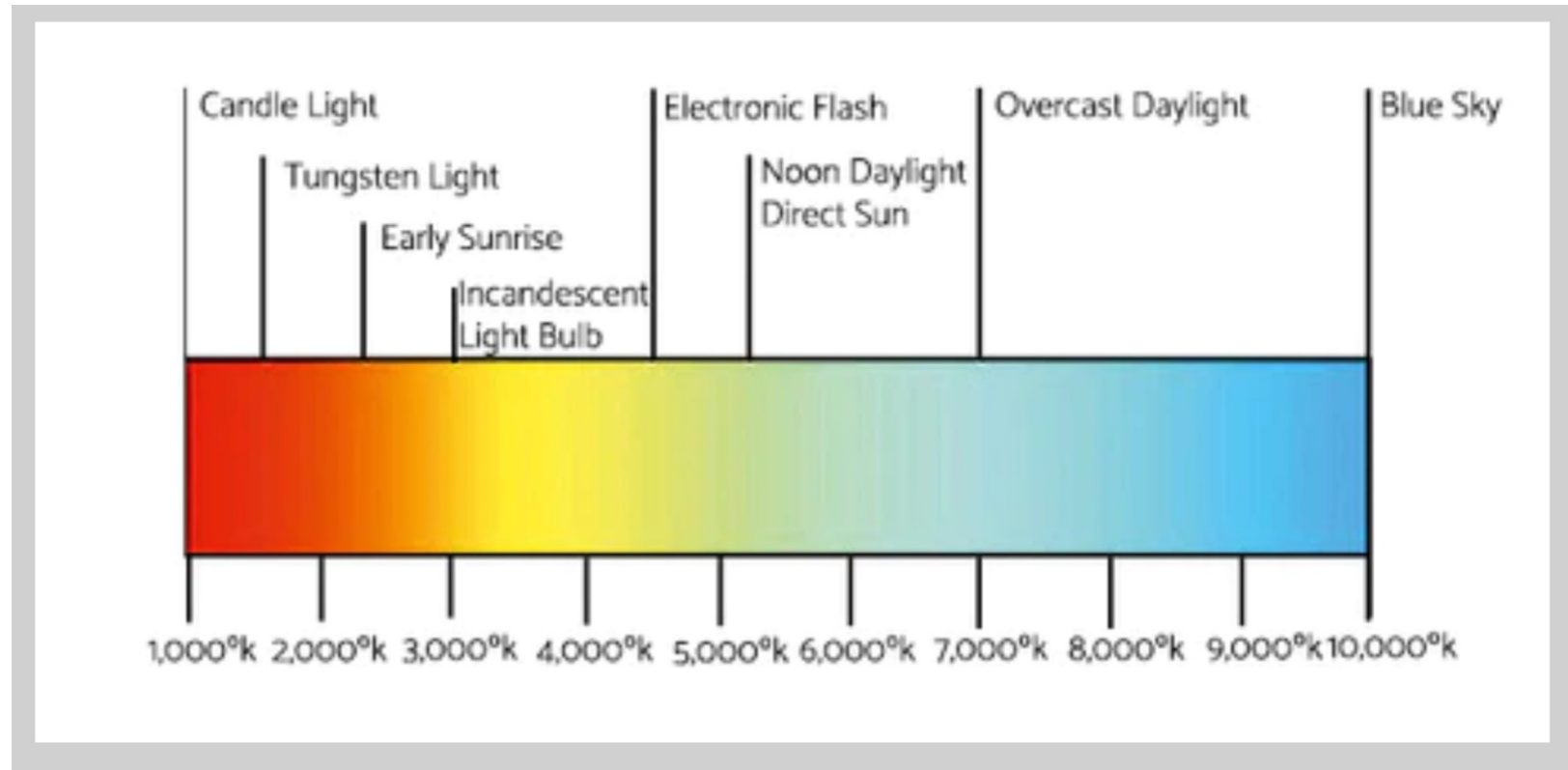
Understanding natural light
















Natural light (the light of the sun) can present a wide and varied range of light situations.

**Time of the day
and weather
/ determines
direction of how
the light falls
onto the subject
/ determines
position of
shadows
/ determines
temperature
(hue) of the light**

Visible electromagnetic spectrum



Visible electromagnetic spectrum

	Temp	Typical Sources	WB Setting
	1000K	Candles, oil lamps	
	2000K	Very early sunrise, low effect tungsten lamps	
	2500K	Household light bulbs	
	3000K	Studio lights (continuous), photo floods	
	4000K	Clear flashbulbs (now obsolete)	
	5000K	Typical average daylight, electronic flash	
	5500K	The sun at noon	
	6000K	Bright sunshine with clear sky	
	7000K	Slightly overcast sky	
	8000K	Hazy sky	
	9000K	Open shade on clear day	
	10,000K	Heavily overcast sky	
	11,000K	Sunless blue skies	

Understanding natural light

Golden hour am+pm



Photo by Veronika Lukasova

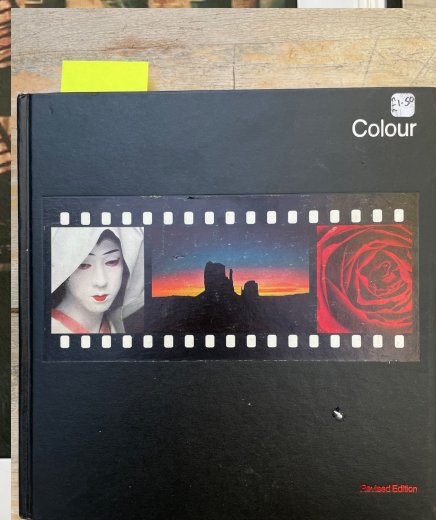
The Warm Glow of Early Morning

The sun is now up, but still very low on the horizon. The light is warm enough to make the bricks of these houses glow. At midday they will be just as red, but their relationship to the other tones in the picture will be different, and that warmth of brick will be lost among the hard colours and black shadows that surround it. Here the areas that are not hit directly by the sun are touched with blue. The large shadow on the far right has blue in it. The white shop front on the far left has become blue. Even the windows swim with blue reflections.

It is these elements—these subtle colour imbalances—that make of this picture not just any street, but a special, after-sunrise empty street, silent still, but about to erupt into the roar and clutter of the day. The picture was taken by Bill Binzen from his own apartment window. He had watched the early morning light creep across the street many times and finally decided to photograph it because it reminded him of a painting by the 20th-century American artist Edward Hopper—an almost identical view of a row of almost identical brick apartments that conveys the same sense of silence, of waiting for the day's work to begin.

Another aspect of the early morning light that the photographer can exploit is the beautiful shadows cast by the low sun. Here the fire-escapes announce themselves with stripes elegantly slanted across the building fronts. At noon this effect would be lost; the shadows would fall straight down and disappear among the slats of the fire-escapes.

Early light of a September morning gives a warm glow to the buildings along a still-quiet New York street. Using a wide-angle lens (20 mm) to include four buildings only a street's width away, Bill Binzen exposed for 1/125 second at f/6.3.



The Richness of Late Afternoon

This is generally considered the most rewarding time of day for photography, and for a good reason. As in the early morning, the elements of low, warm light and long shadow are present, but unlike the situation in the morning this is not a vanishing condition—it grows stronger and more dramatic as sunset approaches. The photographer finds himself working faster and faster to keep up with the wonderful enrichment of the scene that develops before his eyes. Once again, he should pay close attention to his exposure meter; the light at this time dims fast and longer exposure times are needed every few minutes. If he can bring himself to stay in one place, he should do so. He should also try to anticipate what will happen to specific objects. They may be cut off from the sun by an intervening hill or building before the peak light condition is reached. Many photographers walk around and watch what happens to a scene as the sun goes down, then come back the next day and put the observations to work.

The picture on the right is a superb example of the use of warm light and long shadow. The trees are golden on one side, greenish-black on the other. The whole graveyard stands out, more unreal than real, thanks to the shadowed hill behind it. The angle of view is perfect—if the photographer had stood farther to the right, he would have seen too much of the sunny sides of the tombs. Here he has caught only their edges; enough to give them form, enough to do justice to the pale colours of their shaded sides, yet not enough to overpower the glints of light on the smaller headstones, or even the shoes of the people walking across the field.

A combination of late-afternoon lighting and a long focal length lens gives the impression of a Mexican metropolis until the tombs and the tiny, dark figures of the walkers reveal it as a cemetery. Douglas Faulkner shot the picture with a 105 mm lens on his 35 mm single-lens reflex camera, and under-exposed slightly—1/125 second at f/4—to emphasize the deep, rich colours.



DOUGLAS FAULKNER Graveyard in Chiapas, Mexico, 1969



DON HINKLE: *Wet Motorcycle*, 1970



LEIF-ERIK NYGARDS: *Washington Square Park*, 1967

Swedish freelancer Leif-Erik Nygard used a shutter speed of 1/60 second with an aperture of 1/4 on his 50 mm lens to shoot the waterlogged scene above. The soft shades of green are only briefly interrupted by the muted yellow of the refreshment stand's awning and by the action of the youth sloshing his way through the park.

◀ After a spring rain, Don Hinkle went out on New York City's streets with a 35 mm camera and a 35 mm lens. Fascinated by the glistening colours of a parked motorcycle, he managed to mirror the similar fascination of a rain-drenched youngster. Hinkle used a relatively long exposure time—1/15 second at 1/2—but he was still able to get a sharp picture with his hand-held camera.

Rain is interesting to the photographer for several reasons. The first reason is what it does to the atmosphere and to overall colour balance. The second is the challenge of photographing the rain itself. The third is what it does to surfaces and their colours.

Overall, falling rain has a dimming and blurring effect. Colour contrasts are lessened, details are lost. In the picture above, the whole scene is a soft, soppy green. It is wet in the pools rap-

idly gathering on the ground, in the hunched figure of the man with his clothes plastered to him, in the slanting streaks of the raindrops themselves.

The colour of things is heightened by water. Wet rocks, otherwise a grimy grey, become interesting shades of brown, green and purple. Shiny surfaces such as those of the motorcycle opposite glow with silver and blue droplets. And puddles provide dramatic colour accents like the red of the traffic light.



Snow Figures, 1964

This close-up of fresh snow covering rocks on the bed of a shallow river suggests the contours of human bodies, but the cold blues and crystalline whites add an eerie note.



Growing and Wiling Cactus Leaves, 1969

In the extreme close-up made possible by a macro lens, two leaves of a Mexican cactus, one wilted and dying, the other erect and healthy, form a striking abstract composition dominated by the thin red edge of the healthy one.

Understanding natural light

Shooting mid-day



Understanding natural light

Shooting mid-day



Photo by Veronika Lukasova

Colours of the Day: Colour from Dawn to Dark
The Brilliance of Midday

With the sun at its zenith, the light is the closest to pure white that it will ever be, and the contrast between all colours is at its strongest. The result is an extremely bright picture. In the example shown on the right, the sky is a strong blue, the water even stronger. The boats are bright orange rimmed with green, the boatman's oilskin bright yellow. The clashing colours, found only in a photograph taken at the blaze of noon, make the heat strongly felt. The viewer is tempted to escape by crawling into one of those puddles of shade under the boats.

But in spite of all the brilliant colours, this is not a really "colourful" picture. The very strength of the different tones tends to be self-defeating; they cancel each other out. What remains is a powerful assault on the eye, to convey an impression of heat and light pounding down on a tropical beach at midday.

By their very brightness, and by the accent on form that results from the sharp contrasts between dark shadows and the hard highlighted surfaces, pictures made at midday tend to become abstractions. It is not a good time to photograph people. There are 10 persons in this picture, but none—with the possible exception of the two children—comes alive as an individual. Their faces are hidden in the shadows cast by their hats, and they are merely decorative figures in a landscape.

As the midday sun scorched the sands of one of the West Indies islands called Les Saintes, inhabited by fishermen of Breton descent, Bill Binzen attached a 28 mm lens to his 35 mm rangefinder camera to get this vivid photograph at 1/250 second and f/8. The wide angle of view provided by the short focal length lens enabled him to include not only the small boat anchored just offshore but also the beached rowing boats in the foreground.



BILL BINZEN: *Îles des Saintes*, 1967

Understanding natural light Shooting at dusk



Photo by Veronika Lukasova

Poring Over the Picture

This was not a shot that I had planned to capture when I set out to photograph some monuments around Washington, D.C. I was actually walking from the Lincoln Memorial to the Jefferson Memorial and happened to take a route that led me to this view. The light was really nice as the sun was going down, so I quickly set up my tripod on the sidewalk and grabbed a couple of images as the daylight faded. It turned out to be one of my favorite shots from the day.

I used the camera's auto white balance setting to deal with the mix of light from the sky and the monument.

A low ISO setting ensured that I had a clean image, free of noise.

A tripod kept the camera steady during the long exposure.

The long exposure helped to smooth out the surface of the water.

ISO 100 • 2.2 sec. •
f/11 • 35mm lens

Colours of the Day: Colour from Dawn to Dark
The Subtle Shades of Night

In the evening, the eye reduces the world to mere gradations of black and white, but colour film perceives that subtle colours remain. To capture night-time's delicate hues, the photographer must take special measures. The long exposures of night photography require a tripod, especially—as in the photograph on the right—when a long focal length lens is used, because long lenses magnify camera shake.

Long exposures pose another problem, because all films respond more slowly to light when exposure is longer than 1/10 second. To compensate for this effect, the exposure shown on the light meter must be increased according to charts available from film manufacturers. Generally, a sensitive hand-held meter has to be used because night-time light is often too dim to measure with the meters built into most cameras. Most hand-held meters are four to eight times more sensitive to light than built-in ones, and indicate a greater range of exposure combinations.

Exposures of such long length present a more complicated problem, causing shifts in colour rendition. This "reciprocity failure" occurs because of the way modern colour film is designed. It is composed of three layers, each sensitive to one primary colour. During normal exposures—1/10 to 1/1000 of a second—the layers respond essentially equally to light, creating a balanced colour image. During longer exposures the layers respond unequally, resulting in distorted colours.

In the picture on the right—exposed for three seconds an hour and a half after sunset—the exposure was too short to cause a colour shift. Some photographers purposely prolong exposure to exploit these shifts for aesthetic effect (page 210). They can be avoided by using filters recommended by the film manufacturer. □

The photographer used a lunar calendar to find a night when a full moon would rise just after sunset before he shot this night-time panorama of the Seattle skyline. A three-second exposure time records the sky's dusty blue colour without allowing the moon to become a blurred streak.



HARALD SUND: Seattle after Sunset, 1977



Understanding artificial light

Artificial light is a light originating from an artificial source such as studio lights, flashlight, interior lighting, flash gun, phone light etc.

Temperature of the light source translates into a colour cast from blue to yellow.














You can use purposely different light temperatures for an effect.

Mixed artificial light



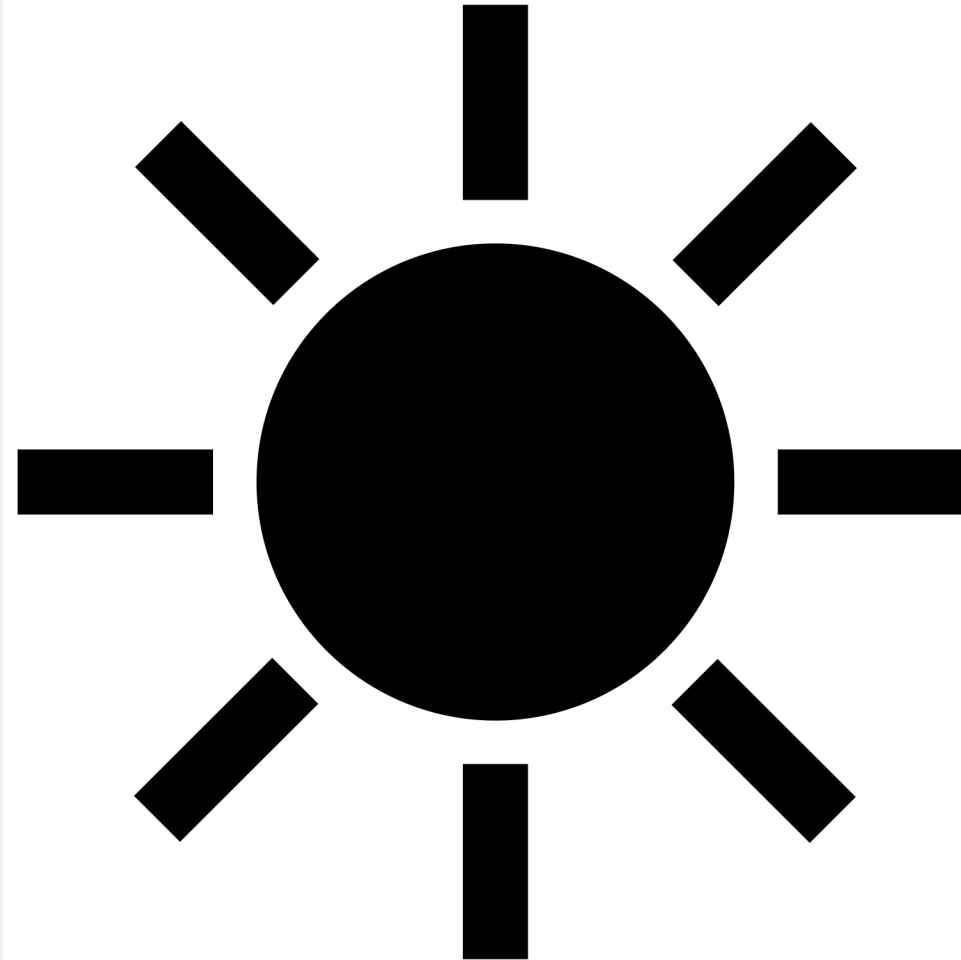
Photo by Veronika Lukasova

Visible electromagnetic spectrum

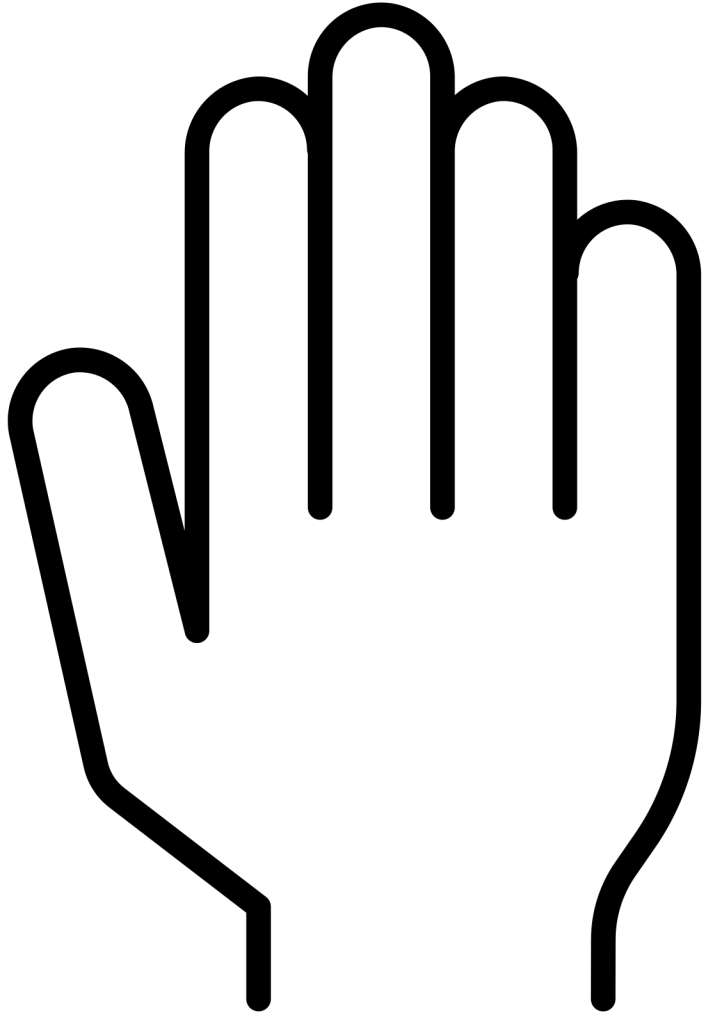
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→ LIGHT METERING /EXPONOMETRY

Light meter is a hand device that enables you to get spot-on exposure when shooting in a difficult light situation – i.e. studio set up with multiple lights



→ LIGHT METERING



18% grey is called “middle grey”, a reference point for photographic exposure. It’s a mid point btw white and black. Some photographers use grey card but….

When exposing outside, you can determine the correct exposure by metering off your hand or a green grass.

This is because they both reflect similar amount of light as 18% grey card



A photograph of two clusters of mushrooms against a black background. The cluster on the left is tall and dense, with long, thin, light-colored stems and small, rounded caps. The cluster on the right is shorter and wider, with shorter, thicker stems and larger, more rounded caps. The lighting is dramatic, highlighting the textures of the mushrooms.

STILL LIFE

Photo by Veronika Lukasova

Classical still life

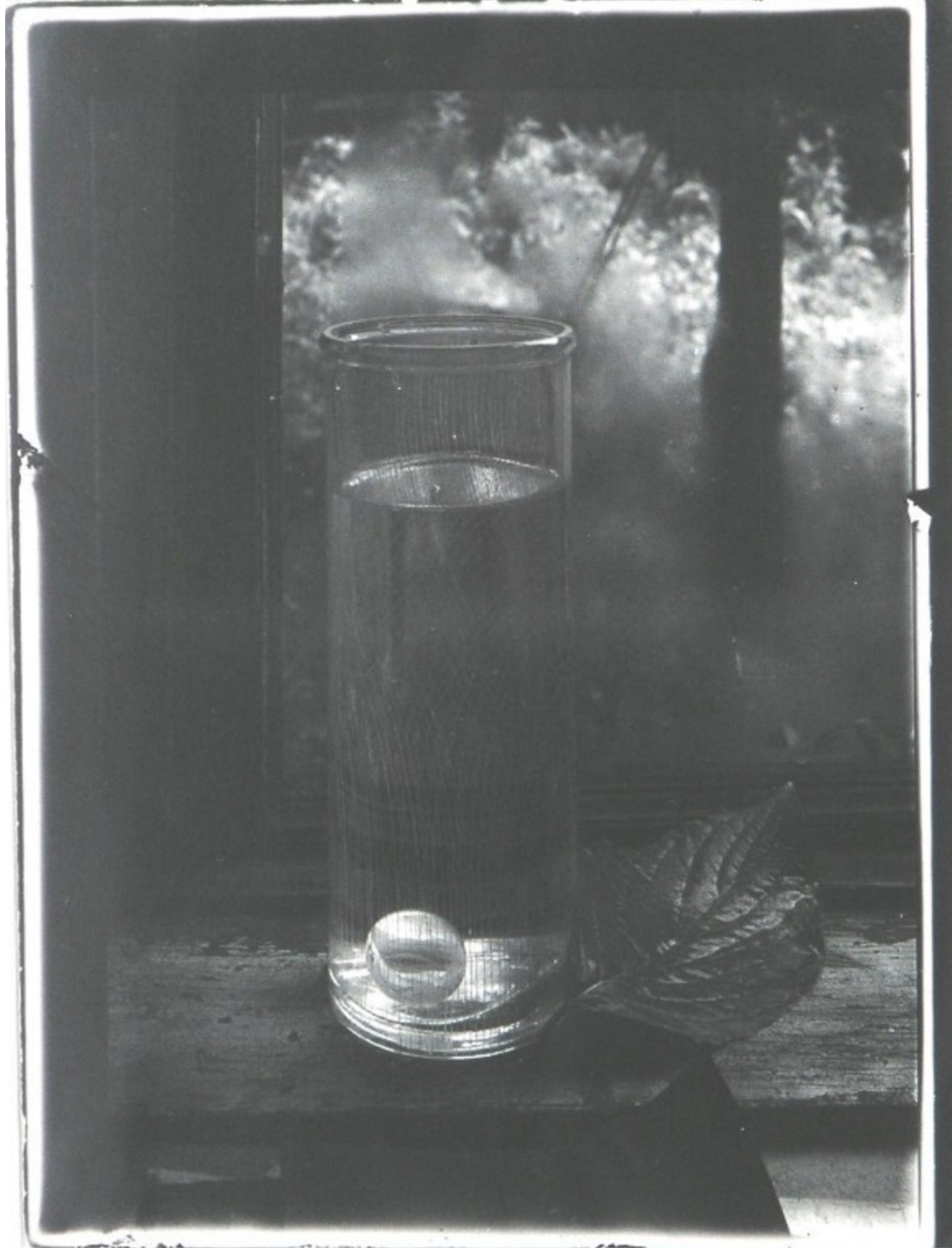


Still Life with Watermelon and a Bee, 1947

Classical still life

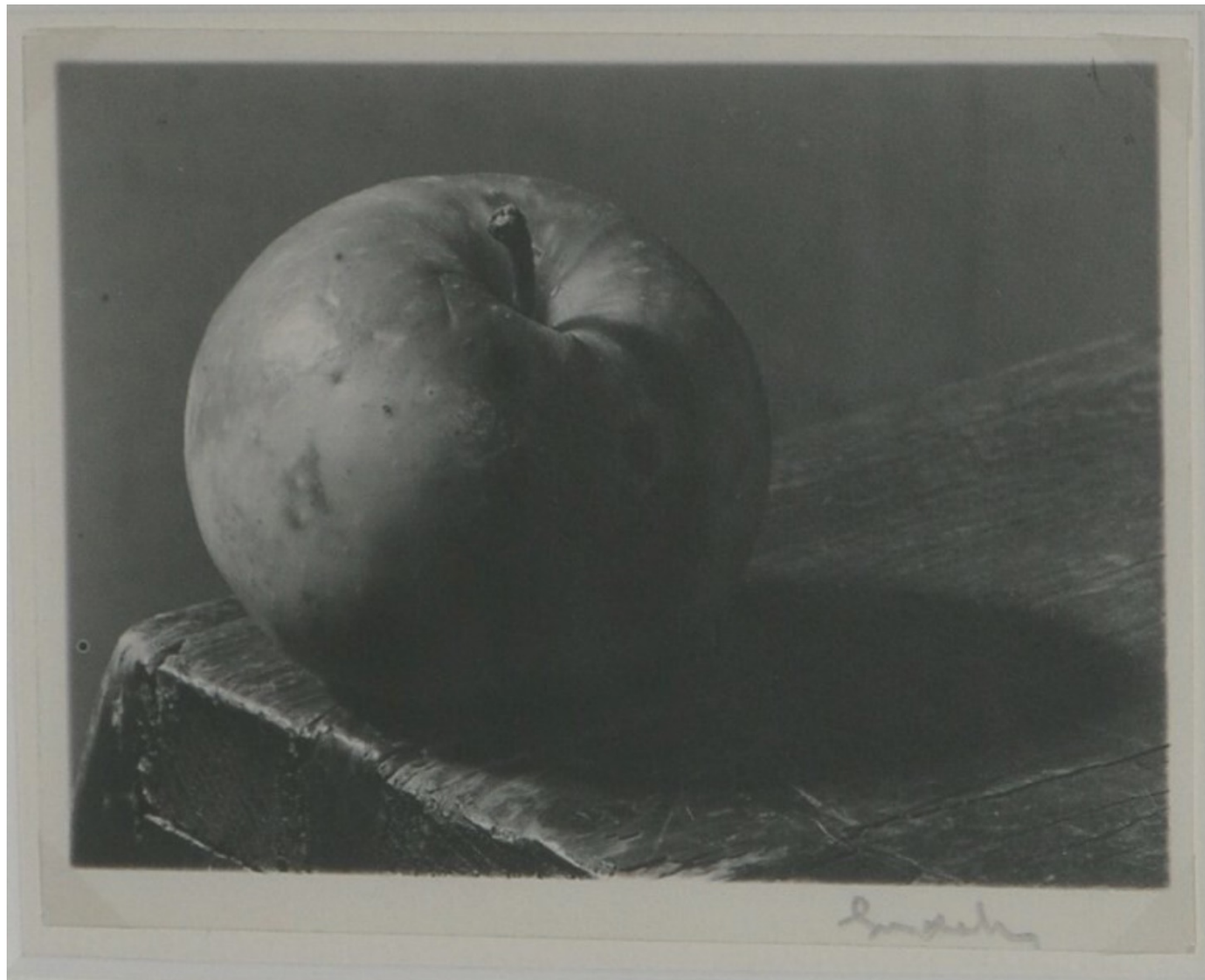
Zátiší na okně.

Josef Sudek



Classical still life

Jednoduché zátiší
Josef Sudek



Classical still life

Zátiší se suchými listy.
Josef Sudek

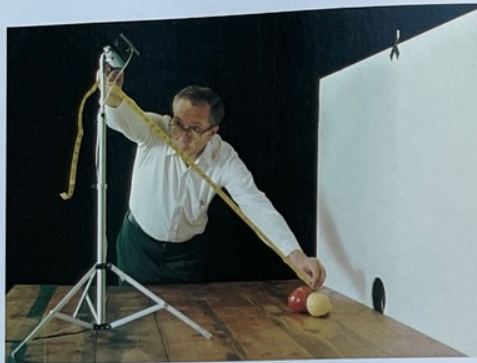


Classical still life

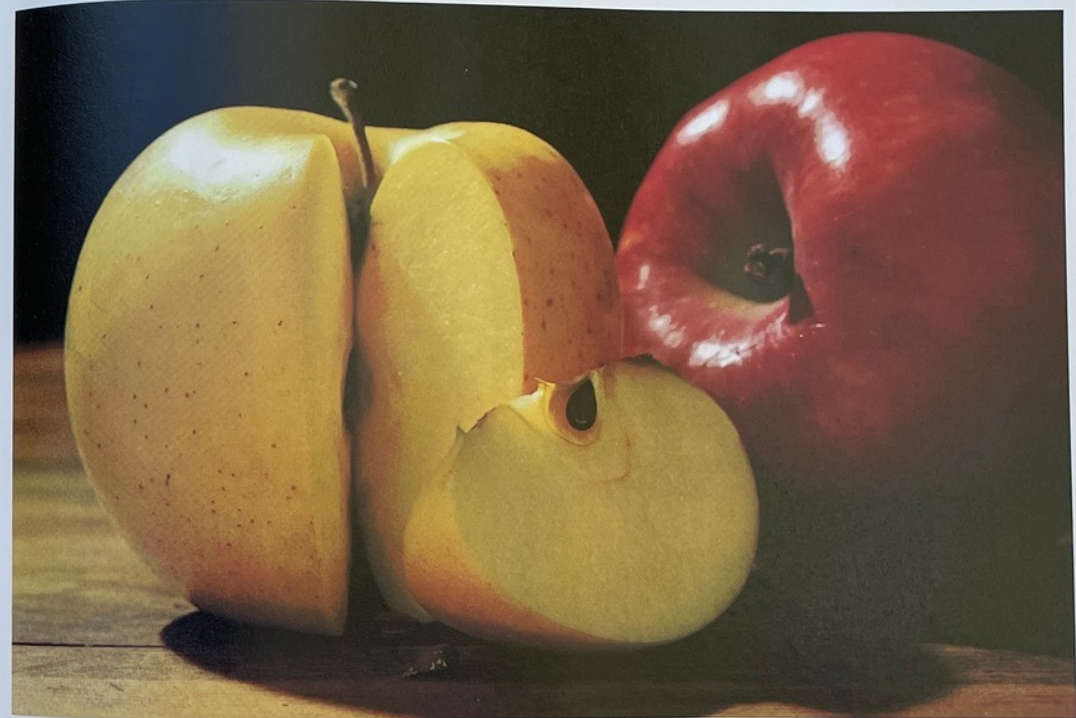
Lighting is the crucial consideration for still lifes. If the illumination is too diffuse, the subject will lack the modeling that suggests its three-dimensional qualities; if the light is not diffuse enough, awkward double shadows will be cast, and colours in the shadows will look artificially different from those in the highlighted areas.

A perfect balance has been struck by freelance photographer Dick Meek in his striking picture of red and golden apples. He used an electronic flash unit as a single light source, directing it from above at a 45° angle. He also set up a sheet of white cardboard to reflect light back on to the apples for soft, fluid lighting. The camera was aimed through a hole cut in the reflector sheet, and it was positioned so that no direct light fell on the lens.

When flash is used for still lifes, it is advisable to judge the lighting in advance by setting up a small floodlight close to the position of the flash unit and noting how the shadows will fall in the final picture. The arrangement of lighting and subject should be made on the basis of what is seen through the camera's viewfinder—not what is seen by the naked eye. If the still life contains a very shiny object, its glare can be subdued by moving it to the back of the arrangement and focusing on the foreground objects—thus throwing the spots of reflection out of focus.



In setting up this picture the photographer determined his f-stop by measuring the distance from the light source to the subject (top) and then used this figure to compute exposure after checking the suggestions supplied with his electronic flash unit. After arriving at the best arrangement of fruit by examining the apples through his viewfinder (above), he snapped the picture with a cable release to avoid jarring the camera—and got the clear, natural still life on the opposite page.



Found still life

Wolfgang Tillmans

Who is Wolfgang Tillmans?

Wolfgang Tillmans is a German photographer. He started receiving recognition in the 1990s with special interests in documentations of youths, LGBTQ culture, and clubs. Since then, he has expanded his practice to accommodate diaristic photography, commissioned magazine work, and large scale conceptual series.



Found still life

Wolfgang Tillmans –
Calama still life,
2012



Found still life

Wolfgang
Tillmans – *Still
life,*
Watermelon,
1997



Found still life



Veronika Lukasova

Conceptual still life

*Liu Wei (né en
1972) Landscape
(montagnes célestes),
2004*



https://www.christies.com/lot/lot-6385868?ldp_breadcrumb=back&intObjectID=6385868&from=salessummary&lid=1

SHOOT A SERIES

Many photographers tend to view a photo series as a long-term project, but it doesn't necessarily have to be. While some photo series can take months or years to create, others can take a week or even a day. A photo series is essentially just a group of photos with a common theme running through them that ties each photo together. Generally, it's a collection of the same or similar subjects or objects rather than simply a range of photos that fit within a wider theme.

When it comes to picking a subject, there are no rules! My favorite photo series range from Alexander Yakovlev's powerful dancer portraits to Seth Casteel's "Underwater Dogs" (which is exactly what it sounds like: photographs of dogs taken underwater that were later turned into a book). Another series I like was shot by photographer Thomas Hawk, who paid a homeless person \$2 to pose for a photo whenever he was asked for money. It was an interesting concept: Instead of receiving a handout, the person earned the money by working for a few minutes while Hawk shot. Hawk, on the other hand, got a great photo series of interesting humans, many of whom had intriguing stories of loss and survival.

Here are some ideas to get you started. Use these as broader jumping-off points rather than final subject suggestions:

- Animals
- Couples (look up Murad Osmann's "Follow Me To" series)
- Bodies and the human form
- Weird portraits (look up Tadas Černiauskas' "Blow Job" series, which documented people's facial expressions as a high-powered jet of air from an industrial leaf blower was blown into their faces)
- Self-portraits
- Street portraits
- Movement
- Suburbia
- Occupations
- Stereotypes
- Reflections
- Nature
- Color (shoot a seven-day "rainbow" project, focusing on shooting things of a different color of the rainbow each day)
- Food
- Fashion
- Fantasy scenes
- Street style
- Cool signs
- "Ugly" things (your challenge is to make them look beautiful!)
- Heirlooms
- Social issues



Conceptual still life

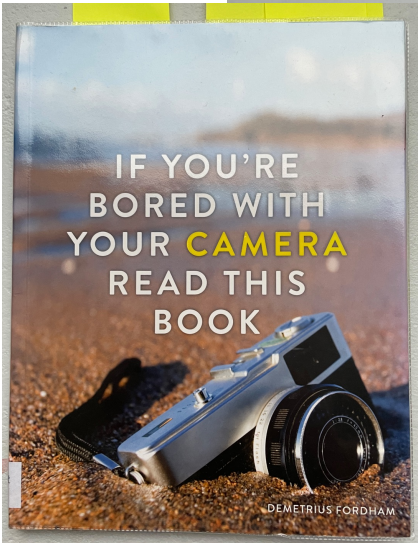
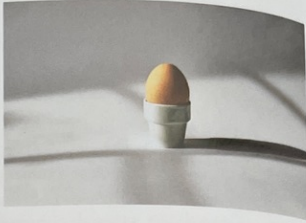
CREATIVE SHOOTING EXERCISES

SHOOT SOMETHING 100 TIMES

One of the best creative exercises suggested to me by a mentor was to pick an object and shoot it 100 times. It might sound boring but, as with any kind of creative constraint, it stretches you creatively.

An ideal subject is one that is dynamic and can take on multiple forms. This isn't as difficult as it seems; a flower and even a simple egg are more multifaceted than you think and can take on many forms (as seen in the photographs opposite). Your subject is as interesting as you want it to be.

Only one rule applies: The same composition cannot be shot twice. Besides that, you can get as crazy and creative as you want! Play with color, light, shadow, focus, and framing. Use different cameras (I recommend a pinhole camera or an instant film camera; see pages 51 and 118). Change up the perspective. Play with filters. Mess around with the subject itself. Turn it on its head; peel back its layers if it has any; see what happens when you break it. You'll be surprised at how many interesting shots you can get from one single subject, and how differently you'll look at any subject going forward.



Conceptual still life

→ **STILL LIFE**
deconstructed



Veronika Lukasova

Conceptual still life



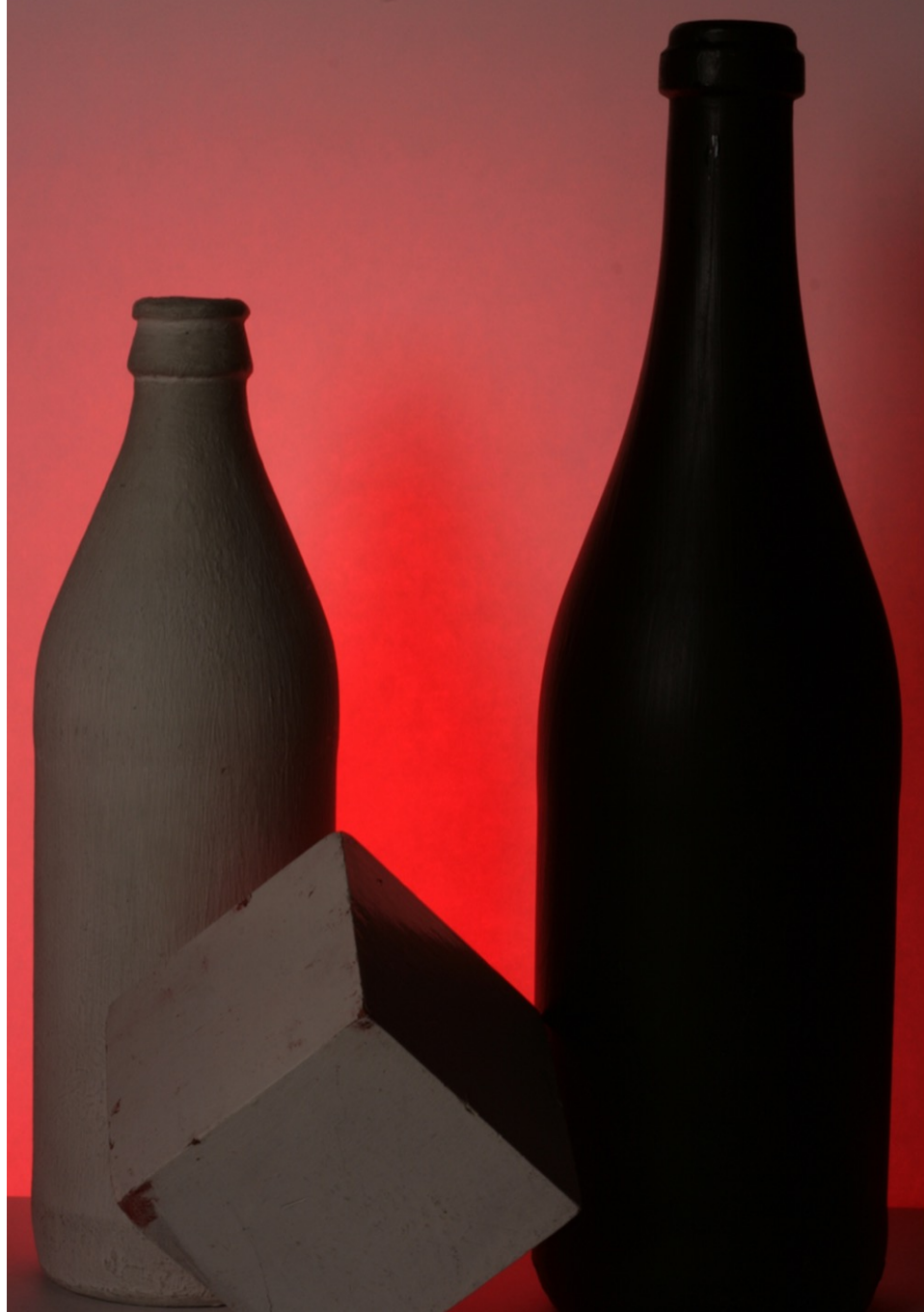
Photo by Veronika Lukasova

Conceptual still life



Photo by Veronika Lukasova

→ **STILL LIFE**
With colour gels





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arina-
glass_table_VV
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Balkova_Darina-
528104_Balkova_
Darina_glass_tabl
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VV033
PHOTOGRAPHY
Light and Surfaces
Session 3

ASSIGNMENT 1
FOUND MIXED LIGHT
SOURCES

DIFFERENT LIGHT SOURCE
DIFFERENT COLOUR
Work by yourself or a
partner around FIMU

→ **LIGHT SCAVENGER**
HUNT

Choose an object and photograph it with at least three different light sources/ combination of light sources. Observe the change of tonal range and hues.

Folder: Light scavenger hunt



VV033
PHOTOGRAPHY
Light and Surfaces
Session 3

ASSIGNMENT 2
Work by yourself around
FIMU

→ **FOUND STILL LIFE**

Go around the FIMU and see if you can find ready made still life.
Photograph in at least 3 different ways without rearranging the objects

Lens 35mm and higher, Fstop 8 and higher. Use Tripod

Submit 3-5 jpgs

FOLDER: FOUND STILL LIFE



Photo by Veronika Lukasova

VV033
PHOTOGRAPHY
Light and Surfaces
Session 3

ASSIGNMENT 3
Work in the Studio in groups

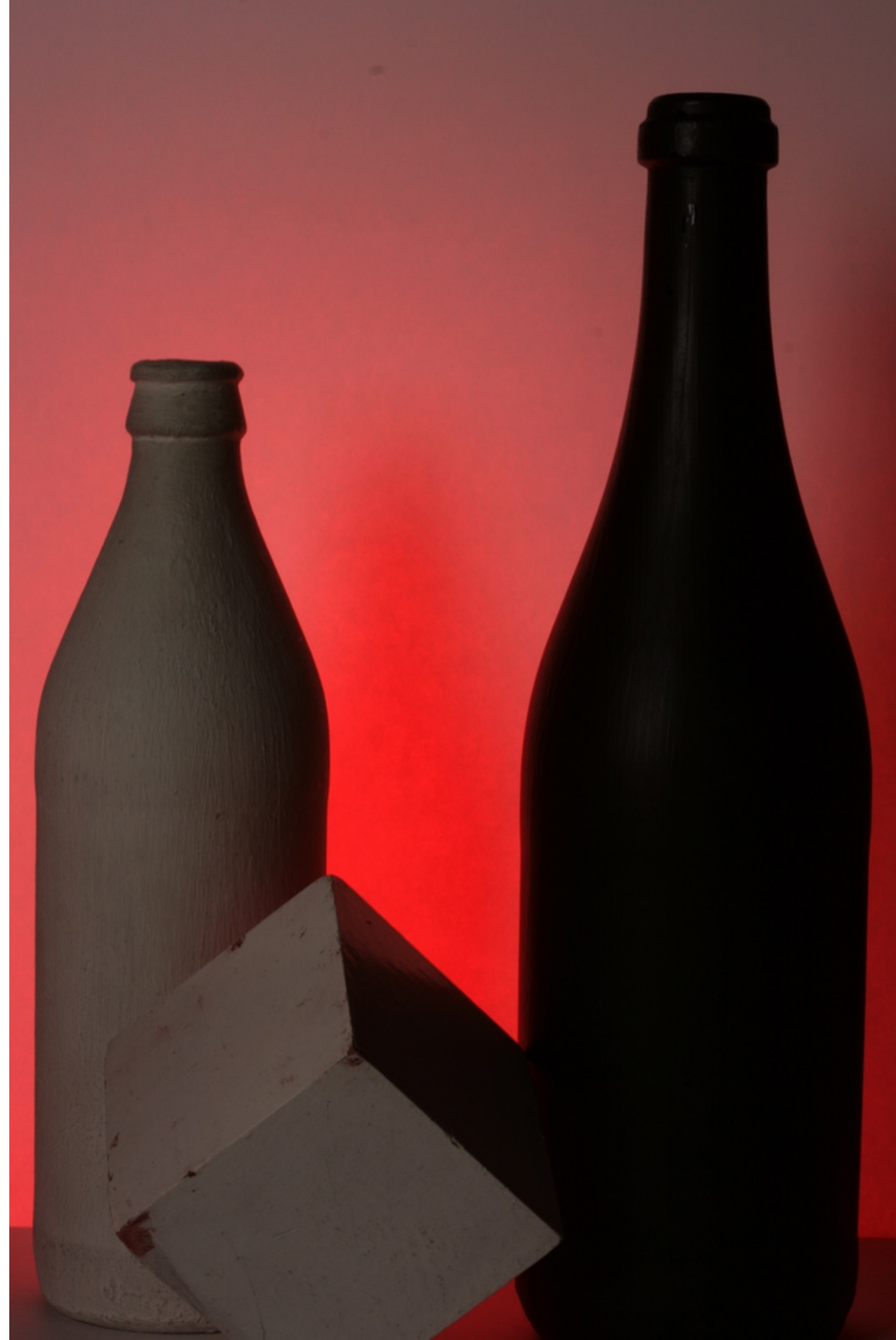
→ **STILL LIFE WITH**
COLOUR GELS

Arrange objects into your own still life, use
2 lights with 2 colour gels.
Photograph your still life in at least 3
different ways compositionally without
rearranging the objects

Lens 35mm and higher,

Submit 3 jpgs

FOLDER: STILL LIFE WITH COLOUR GELS



VV033
PHOTOGRAPHY
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Session 3

ASSIGNMENT 4 - BONUS
Work in the makeshift studio
in groups

→ **PAPER STILL LIFE**

Create a 3D object – still life-landscape out of paper and photograph your still life on a white or dark backdrop with a continuous light/lights. Create at least 3 different light/shadow scenarios without moving the camera (i.e. use tripod!)

Lens min 35mm

Submit 3 jpgs

FOLDER: PAPER STILL LIFE



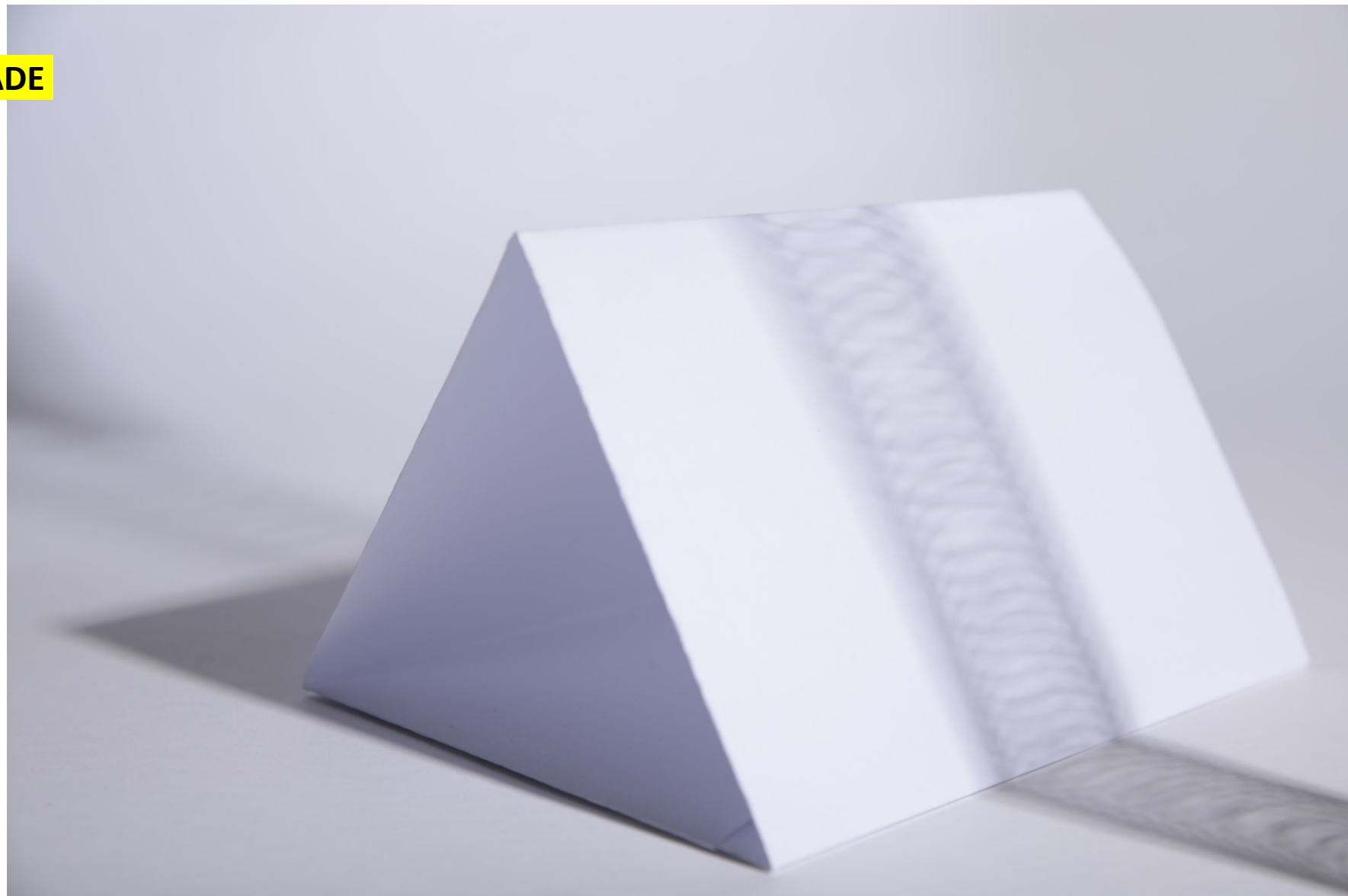
Conceptual still life
YOUR OWN 3D OBJECT MADE
FROM PAPER

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Petrekova_Katarina-
composition_with_shado
ws_VV033_1



Conceptual still life
YOUR OWN 3D OBJECT MADE
FROM PAPER

528104-
Balkova_Darina-
528104_Balkova_D
arina_composition
_with_shadow



A GUIDE FOR CREATIVE CRITICISM

**Be fully present
Participate
Ask Questions
Listen**

**Agree to Disagree
Allow for Emotions
Be Specific
Be Open-Minded
Be Honest**

**Mgr. et MgA. Veronika
Lukášová, Ph.D.**

VV033 2023

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