

# LIGHT

ARCHITECTURE 2

URSRECHER



This book is supposed to be “different”. Unlike most photography books it does not give fixed rules, such as how this or that has to be illuminated, or which contrast is the right one and which focal length and shutter speed has to be used.

Every photographer still has to decide how he (or she) wants the photograph to look. I just try to give an idea how light functions. With the theoretical background, we should be able to get the result we want.

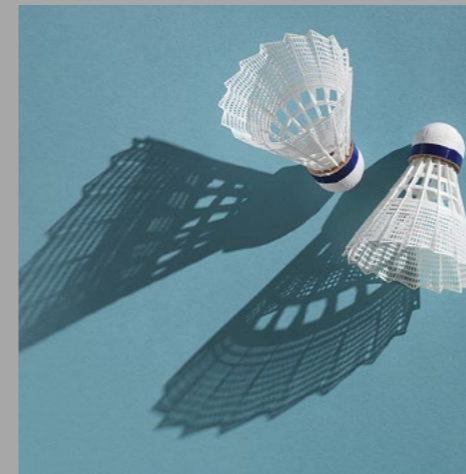
Before we start analysing photographs and set-ups, we should take a brief look at light and its rules. This helps to really understand why which lightshaper is used and – just as important – where and how it should be placed.

We have to understand the set-ups and should not try to learn them by heart or copy them like a menu from a cookery book! When we understand the rules, we do no longer have to hope for good results and can determine how to modify the light until we get the effect we are looking for.

Our technical abilities in forming light must not limit our creative visions! And in a second step – after having achieved a profound understanding of light – we should start forgetting about all the technical aspects of our work and only concentrate on the visual, the emotion, the moment and the model.

All the photographs are shown with a minimum of manipulation. I want to give a very honest and realistic impression on what can be expected, when working with the set-ups as explained in Chapter 2. In particular the skins are not retouched and the original texture is still visible.

All the names of the lightshapers used in this book refer to the broncolor system that is described in chapter 3. It is the lighting system I use for my daily work, and it is the one with the widest range of lightshapers. It therefore offers the most creative possibilities when working with the most important tool of a photographer: LIGHT.



## 1.1 Hard, Soft And Diffused light

### 1.1.1 Hard light:

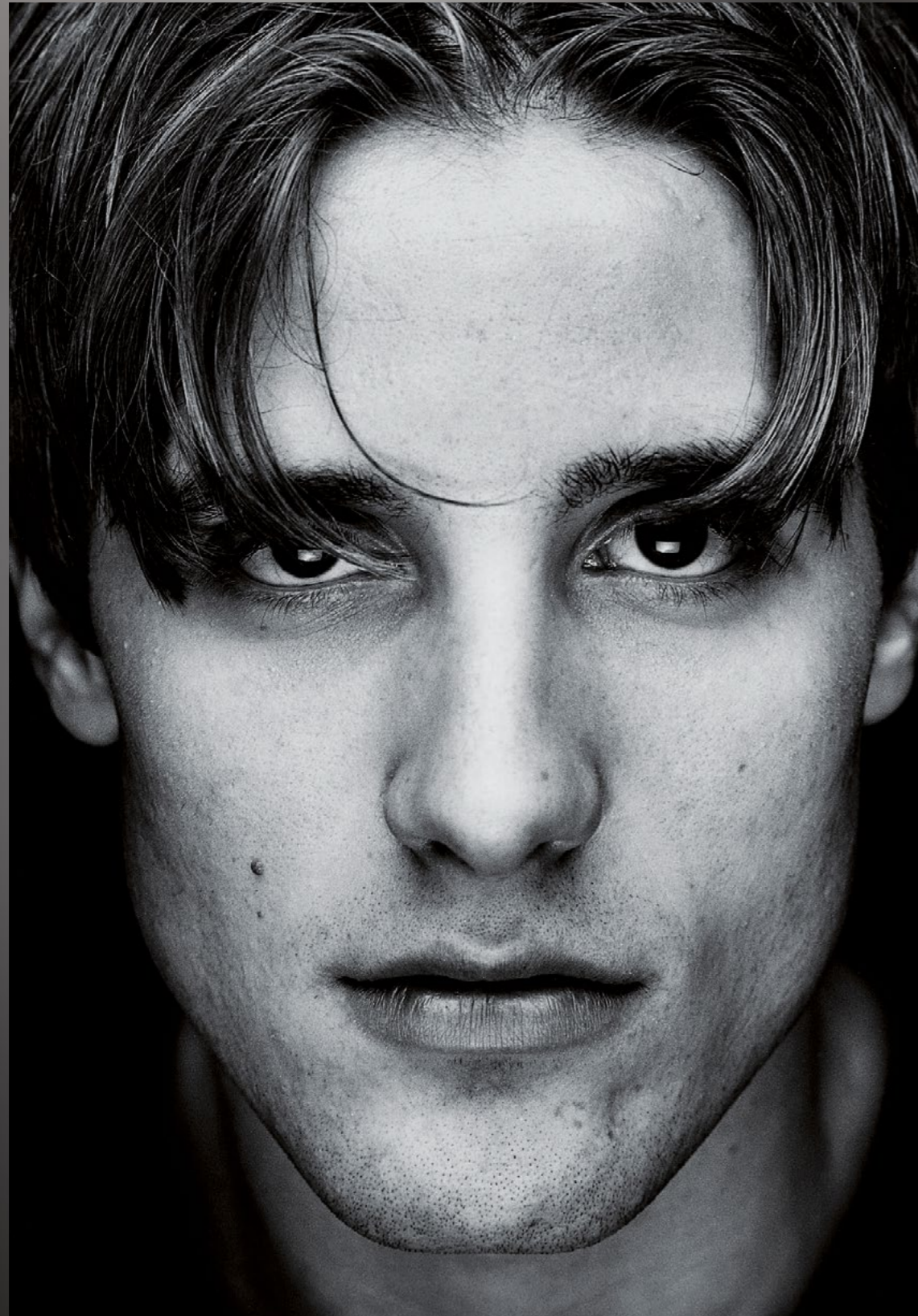
Looking at the light of a point light source, we will see very clearly defined shadows. On a background or underground there is either light or shadow, but nothing in between, with no gradations. Even the finest details provide a clear shadow. The structure of any object (e.g. textile, skin) is pointed out very clearly.

A very hard light source is the only one that does not change its characteristics when we vary the distance (but it does change the power – see “1.3 The inverse square law”). The shadows remain the same: very sharp.

Hard light may increase the contrast of the object. The areas directly lit may be burnt while the shadows remain very dark. The hardness of the light finally has an influence on the color saturation. Small, hard light increases the saturation of the picture while soft, and especially diffused light reduces it.

*The following lightshapers can be used as hard lights:*

*Any open reflector like P70, P65, P45, P50, PAR reflector, when used over a certain distance; i.e. a few meters or more. Fresnel spots like Pulso Flooter, Pulso Spot 4, Fresnel spot attachment for Picolite. Optical systems like Pulso Spot 4 with 150 mm Optical snoot, Projection attachment for Picolite and Profil 15/42. Sunlite-set, Litestick or bare bulbs (lamphead with no attachments at all).*



**Camera type and Medium**  
35 mm SLR/ black and white negative

**Resolution / Sensitivity**  
24 × 36 mm / ISO 100

**Focal length**  
135 mm

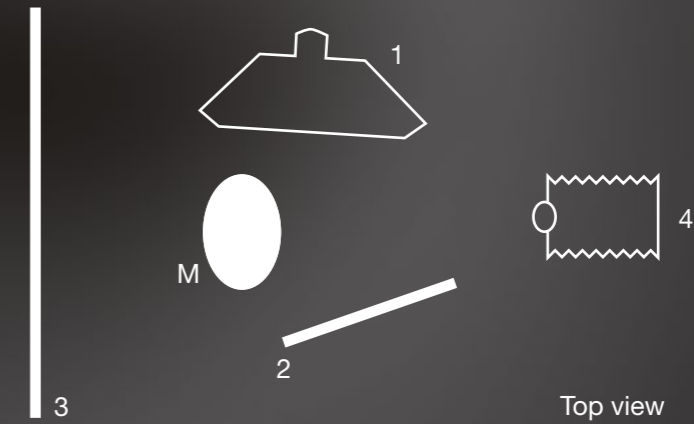
**Shutter speed / f-stop**  
1/60 sec / f 11

A reasonably sized softbox (Pulsoflex C 60 × 100 cm) was chosen to shoot this portrait. It was placed very close and right above the head. As it is used at an angle of about 90 degrees to the camera, the light is not flat or too soft, but shows a dramatically shaped face.

I made sure that the fill-in is not diffused by using a mirror as a “hard reflector”. This tool is used at an “aggressive angle” by touching the model’s upper body, causing the only reflection to be seen in the eyes. In a photograph with a hard main light, you should not use this kind of reflector, as you may get twin-shadows.

If the light becomes too harsh, both the main light and the reflector can be moved slightly towards the camera.

- 1 Pulsoflex C 60 × 100 cm on a unilite lamp base
- 2 Mirror
- 3 Black background paper
- 4 Camera
- M Model



Unilite Pulsoflex C 60 × 100 Nano 2



**Camera type and Medium**

Large format with digital back

**Resolution / Sensitivity**

22 Mpixels / ISO 50

**Focal length**

100 mm

**Shutter speed / f-stop**

1/2 sec / f 22

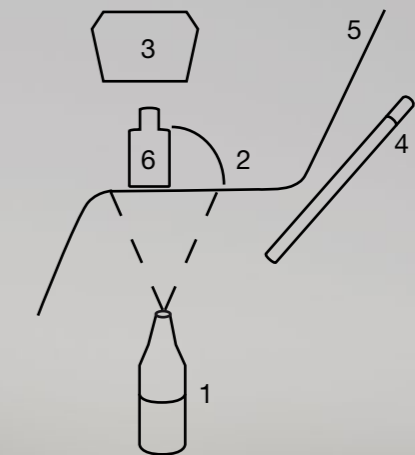
A Picolite (1) on a floor stand and equipped with a projecting attachment illuminates the acrylic table below and behind the frosted bottle. To compensate the strong gradation this light creates, we place a concave and silver coated cardboard (2) behind the object (6).

A Striplite 60 (3) is placed as low as possible and horizontally above the bottle's cap. Due to the low position, the light of this Striplite has no undesired effect on the background (read chapter 1.3 The Inverse Square Law).

The concave background finally is lit with a Litestick (4). With its distance to the table we define the gradations and the contrast. We use the integrated heat protection to create the dark line between the two highlights.

The lightstick is connected to an independent Scoro pack. We program this unit with a short delay, maybe 1/2 sec, so we expose the background 1/2 sec later than the main lights - enough time for us to hold a strong soft filter in front of the lens before we fire the Litestick. This softens the contours of the bottle.

- 1 Picolite with projecting attachment
- 2 Concave mirror
- 3 Striplite 60
- 4 Litestick
- 5 Small acrylic background table
- 6 Frosted bottle



Side view



Picolite small lamp



Projecting attachment for Picolite



Striplite 60



Litestick



Scoro A2S



Scoro A4S

2.5

mixed lights



**Camera type and Medium**  
Large format / slide

**Resolution / Sensitivity**  
4 x 5 inch / ISO 100

**Focal length**  
90 mm

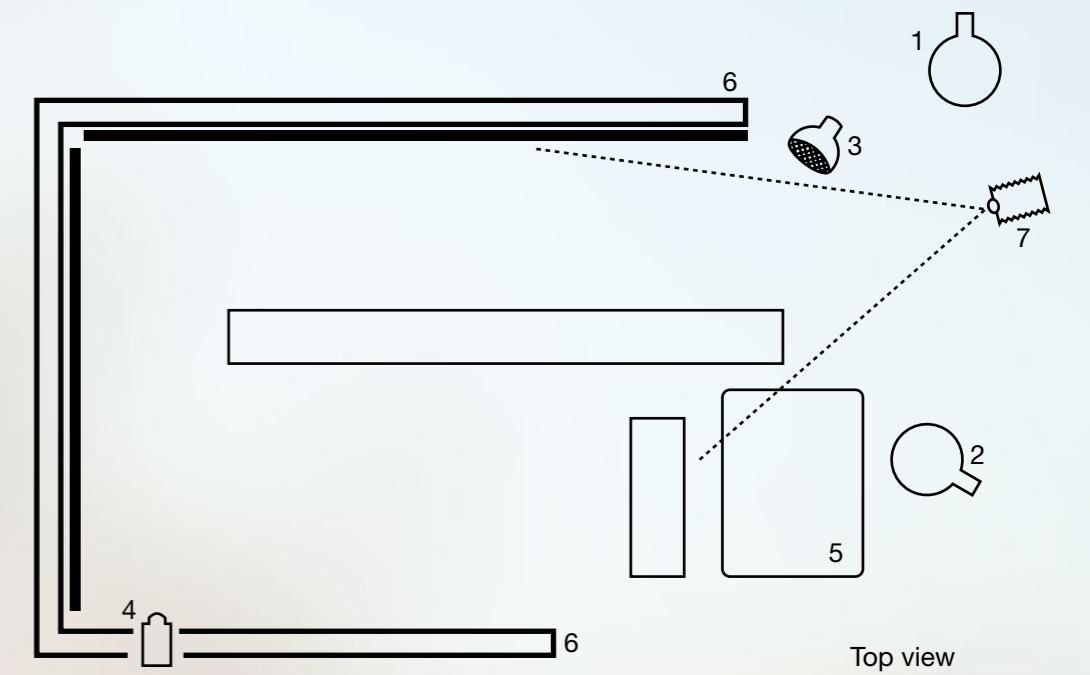
**Shutter speed / f-stop**  
1/2 sec / f 11

The Balloon on the left (2) is supporting the available daylight coming through the skylight (5). The second Balloon is used as a general fill-in.

The spotlight of the Standard reflector with narrow grid (3) breaks the very even illumination on the walkway and the bare bulb close to the background produces another strong accent.

The warm-tone fluorescent lights are slightly burnt and therefore lose their color partially.

- 1 Balloon on a Unilite lamp base
- 2 Balloon on a Unilite lamp base
- 3 P70 Standard reflector with narrow grid on a Pulso G lamp base
- 4 Pulso G lamp base (bare bulb)
- 5 Daylight
- 6 Fluorescent light (warm-tone)
- 7 Camera





#### Profile of Urs Recher

|                       |   |
|-----------------------|---|
| 1967                  | Born in Basel, Switzerland  |
| 1983 – 86             | Attended high school in Muttenz, Switzerland  |
| 1987 – 89             | Study of mathematics and physics at the University of Zürich, Switzerland                               |
| 1989 – 93             | Apprenticeship in photography at the School of Arts and the Studio Heusser+Hertig in Basel, Switzerland |
| 1993                  | Received certificate in photography of the School of Arts, Basel  |
| 1994 – 96             | Independent photographer in Santiago de Chile, Chile  |
| 1996 – 98             | Independent photographer and freelance assistant in Switzerland and The Netherlands                     |
| since 1998            | Photographer and consultant at Bron Elektronik AG, Switzerland  |
| since 1997<br>in 2000 | Married to Debby and<br>Daughter Anouk was born   |

