## Shadows

The painting of shadows causes many artists to fall into a number of traps.

- The most common of these is in painting from photographs, where the shadows are completely devoid of colour.
- The direction of shadows- due to changing light source through the day.

Other areas of concern are:
form and cast shadows
tone or value of shadows
shape
texture
colour-including colour bounce
These areas will be explored in the following article.

## - Shadows in photographs

When the camera takes a photograph, the shutter is adjusted to the best overall light in the direction it is being aimed at. Consequently, as it measures the average light source from the direction in which it is aimed, the shutter adjusts itself to that level of light and the darks become much darker. Look at the shadows in your photographs and see for yourself.

- The eye operates in a similar way to a camera and adjusts the light to the view. Have you noticed that when you are looking towards the sky that the horizon appears darker. Try it.
- However, you can override this effect by changing your viewpoint to the darks and blanking out the lights. The tones and colours of the shadows then appear.

Also, when you take a photograph, the colours of the shadows appear in the negative, the second process of producing a positive print turns them black. So if you copy a photograph accurately, with black shadows it will always look like a copy of a photo

## - Form Shadows and Cast Shadows

There are two types of shadows. These are form shadows and cast shadows.
Form shadows are on the sides of objects facing away from the light.
Cast shadows are produced by these object on other objects, whether they are the ground, other buildings etc.

## - Tone of shadows

The tone of shadows can be affected by various things, e.g. light bounce, but a good benchmark used by some would be that an object in shadow is approximately $40 \%$ darker in tone than the side that is in the light.

In other words, assuming a value scale from 0 to 9 where $0=$ white and $9=$ black:
a white object of 0 value will have shadows of value 4 in greyness.
a value 3 object will have shadows of value 8 in greyness.

However, this is not a golden rule and you should always paint what you see and feel, not what you know, unless you are aiming specifically to produce an exaggerated effect.

Shadows are also affected by different sources of light i.e., spotlighting or flood lighting.

Spotlighting (including sunrise and sunset) will produce much sharper edged shadows, However the strength of light will also have a bearing on this subject.

Also the cast shadow from an object is stronger than the form shadow on that object-this is due to light bounce from the ground or other objects.

Another very important point is that cast shadows are strongest next to the lightest shapes and are lighter in their centres. The camera never, never, never, ever sees this effect.

And you thought it would be easy !!!!!!!!!!!!!!!!!!!!!!!!!!!!!

## - Shape of shadows

Form shadows will always be indicated on the side of objects away from the light.
Cast shadows will be constantly changing in sunlight due to the passage of the sun through the sky.

It is essential, therefore, to take a "snapshot of the shapes with your drawing to ensure that they are all going in the same direction. Every art exhibition has paintings where the artist has forgotten this and the shadows painted in the morning are going a different way to the ones painted in the afternoon.

## - Texture of Shadows

The nearer the shadows are to the object casting them, the stronger and sharper will be their edges.

This is caused by light bounce from surrounding objects into the shadows. Notice how the far edges of shadows cast from trees are quite soft whereas the shadow edge near the tree is much sharper.

## - Colour in shadows

The colour of shadows always has the colour of the source object within it but also takes on the complement of the light source. Now as the sunlight in nearly always a yellow glow, so the shadows will include the complement of this light source which in most sunlight situations would be purple.

However, supposing we had a sunset, i.e. a red sky, then the complement in the shadow would be green.

Also if, for instance, a house was situated in an orange field lit by a yellow sun, the shadows would purple (the complement of yellow with a shadow centre of orange through the light bounce from the field.

Try it with various combinations of colours

