Notes On The Use Of Tone In Drawing And Painting

Andrew Newland

TEACHING ART & DESIGN

Sheeaun, Kilmaley, Ennis, Co. Clare, Ireland.

These notes are copyright Andrew Newland



Contrusts of tone exaggerated where they meet.



The Use Of Tone To Define Shapes

In a shaded drawing, differences of tone are used to define the boundaries of objects. Although in drawing you will initially work in line, ultimately it is the tones that create the shapes, the original line being merged into one of the adjacent areas of tone. Sometimes the differences in tone will be very slight, but they will be just sufficient to define the edge. If there is absolutely no difference of tone, then the edge of the object will not be visible at all, but usually some difference can be identified.

Infact what happens when we look at objects, is that slight differences of tone appear to become exaggerated in order for us to see shapes. If one surface is slightly darker than another, it will appear even darker, and the adjoining surface lighter.

Sometimes you will find that the same surface adjoins both darker and lighter surfaces in different places. Against the darker shape it appears lighter, and against the lighter shape it appears darker. This is very often only an illusion as the real tone of the surface maybe the same throughout, but the effect can be used in drawing to make the shape more defined.



The funce is in reality the Same tone throughout, but appears lighter against the dark hodge, and darker against the shy

In selecting a composition, try to arrange for light tones to be contrasted against dark ones, and for dark tones to be contrasted against light ones. This way, the objects in your composition will be clearly defined, and there will be a more pleasing balance of light and dark across the composition as a whole.

In order to understand the arrangement of light and dark tones across the surface it is useful to consider the light sources that are creating these effects.

Sources Of Light On The Subject

In any subject the light may come from a variety of sources, natural and artificial. Very often the subject will be lit by a variety of light sources, possibly combining both natural and artificial light. It is worthwhile identifying what these are, as it will help you to understand the effects of light and shade that are created. Generally speaking, one directional light source will create an image with more drama. Using several light sources can cancel out this effect, and produce quite complicated shadows and highlights.

Shadow Subject Single Light Source Multiple Light Sources

More complex shadows.

Notes On The Use Of Tone In Drawing And Painting Page 2

sun Subject Sun Set Rise O----- W E C S Mid Day

Sunshine

Natural Light Sources

Natural daylight will vary according to the prevailing weather conditions. If it is a overcast day, the clouds will act as a diffuser and spread the light fairly evenly over the subject with only subtle differences between brighter and darker areas. On a bright sunny day however the direction of the sunlight will be much more apparent, causing strong shadows, and there will be much greater contrast between brighter and darker parts of the subject. One of the problems is the movement of the sun during the course of the day, causing the shadows to change while you are making the picture.

If you are working indoors by natural light, the window will have the effect of making the light more directional. Even on a dull day there will be soft edged shadows on the side of objects away from the window. Bright sunlight coming in a window, will move an appreciable distance as the sun moves around, even within a short space of time. For this reason artists traditionally preferred studios to have 'north light', avoiding (in the northern hemisphere) the problems associated with moving shadows from direct sunlight.

Artificial Light Sources

Artificial light sources can be divided into two types, overall or diffuse light, and point sources of light. Fluorescent tubes produce an overall diffused type of light, similar to conditions outside on an overcast day. There will be no strong shadows, and a lack of contrast of tone.

A light bulb, however, will produce a more directional light, with sharply defined shadows. A spot light would intensify this effect still further.

Light Reflected From Surfaces

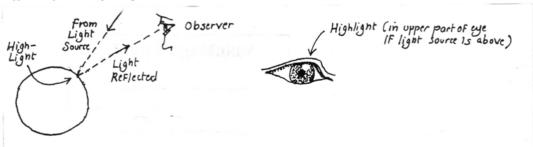
This is in effect another source of light. Light coloured surfaces, in particular white ones, will reflect quite a lot of light. This can lead to parts of the subject becoming unexpectedly light in tone. For example a spherical shape resting on a white table cloth will probably be found to be fairly brightly lit from underneath. This will not be as bright as the part receiving direct light however, and there could be a slightly darker area between the two areas.

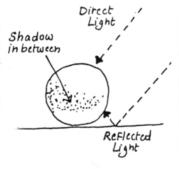
The same effect can be seen out of doors. A white painted wall will reflect light into shadow areas. On a bright day water will reflect a lot of light, so that for example the part of a boat hull that curves under may be found to be quite brightly lit.

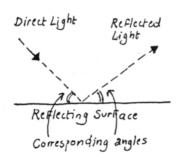
Reflections And Highlights On Objects

The more shiny the surface, the more it will reflect light. The most shiny surface would be a mirror, but many less shiny surfaces will have some kind of reflection, for example polished wood. The least reflective surface would be a matt surface.

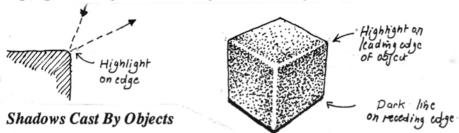
A surface will reflect light at an angle corresponding to the angle at which the light rays hit the surface. The diagram should clarify this. For a spherical object, if the light source is above and infront of the sphere, it will be reflected somewhere in the upper part of the sphere, depending on where you are viewing it from. A highlight will often appear in this position on a human eyeball for example. Putting a highlight into the drawing in this position, will go a long way towards creating the effect of a shiny surface.





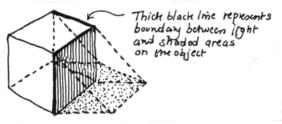


Notes On The Use Of Tone In Drawing And Painting Page 3 In the same way, an edge between adjoining surfaces will often reflect light. This is because the edge is angled in such a way as to reflect the light back to the eye of the observer. Generally speaking, any edge which comes toward you will tend to have a highlight running along it, whereas an edge that recedes away from you will tend to produce a dark line. Thus in the example of the box, the front top edge will have a highlight, but the front bottom edge will create a dark line. The brightness of the highlight will depend on how reflective the surface is.



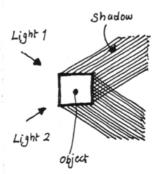
The extent to which objects cast shadows depends on the intensity and direction of the light. Very diffuse low level lighting may produce only the slightest hint of a shadow, as for example out of doors on a dull day. On the other hand strong directional light will produce very contrasty, sharply defined shadows, as on a bright sunny day for example.

The shape of the shadow will be determined by the boundary between light and dark areas on the object itself. In other words the edges on the object that divide it into the light area, and shaded area, will form the profile that casts the shadow.



Object Parallel light rays Shadow

Divergent light rays



Another factor in determining the shape of the shadow is the extent to which the light rays are diverging. Rays of sunlight, because of the distance from the sun, can be regarded as effectively parallel to one another. The width of the shadow will be approximately the same as the width of the object casting the shadow. Rays of light from a spot light, however, will be diverging from the light itself. The shadow will appear wider than the object itself.

The length of the shadow is determined by the angle of the light rays to the surface on which the shadow falls. Bright sunlight at midday in the summer produces short shadows because the sun is high in the sky, but a sunset produces long shadows because the sun is near the horizon. Shadows often appear less dark, the further they extend from the object casting them.

If there is more than one source of light, then you will have the corresponding number of overlapping shadows. If two shadows overlap it appears that it is twice as dark in the overlapped area, infact of course what happens is that the second light source lightens part of the original shadow area as well as creating its own shadow. If the two light sources are of varying intensities, the shadows will vary accordingly.

Strong shadows in a picture create stronger contrasts of tone, and more impact in the composition. When considering a particular subject out of doors, it is worth studying the effects of light at different times of the day, and if possible at different times of year, as in winter time the sun rises and sets at different points on the horizon from the summer.

** Sun high overhead Sun low in sky Short Shadows Long shadows

Notes On The Use Of Tone In Drawing And Painting Page 4

The distant landscape appears paker intone

Tone And The Effect Of Distance

Things that are further from you will have less strongly contrasted tones. This is most obvious in a landscape, where the distance appears to be paler than the foreground. Creating this effect in your drawing will help enormously in the creation of distance.

One of the problems with landscape painting is that it is often most convenient to start working at the top of the picture and work downwards. This means that the distance will be drawn in before the foreground. If you are not careful, you can easily find yourself using too great a contrast of tone in the distance, making it impossible to distinguish it later from the foreground.

Strong dark tones or lines will tend to appear to come forward in the picture, and lighter areas or paler lines will appear to go back. Using this carefully can create an impression of depth in the picture, but of course other factors will influence you in your strength of tones and lines.

Tone And Colour

It is essential to establish the correct tones in a drawing or painting, regardless of whether you are using colour or not. If you use colour without properly observing the correct tonal value of those areas, the resulting picture will tend to look flat and lacking in contrast.

The tonal value of a coloured surface will be a combination of many factors; how dark the colour itself is, how much light is falling on it, and how much it will be reflecting light.

Working With Tone In Drawing Or Painting

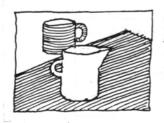
It is useful to appreciate the range of tones that you have available to you. If you are using a media such as pencil on white paper, the lightest tone will be the white of the paper itself, and the darkest tone will be the heaviest mark that it is possible to make with your chosen pencil or drawing implement. If you are working in say pastel on tinted paper, the lightest tone will be the strongest use of a white pastel.

Look at the subject and decide where each tone that you see fits into this scale between light and dark. It may help to look at the subject with your eyes half closed. The resulting rather dimmer blurred view may help you to concentrate on the relative tonal values, rather than the detail.

It is important to make sure that you not only observe the difference between light and dark in local areas, but also see how these tones fit into the overall pattern of light and dark. For example in drawing a still life you must not only correctly observe the pattern of light and dark within each object, but also how these areas compare to all the other areas of light and dark across the composition as a whole.

Some people will advise you to start drawing or painting with the darkest tones, while others will advise you to start with the light tones. To some extent it depends on the media you are using, as in some types of media it is easier to make things darker than it is to lighten them again.

In conclusion, try to remember two basic principles. Arrange light against dark, and dark against light. Contrast comes forward, lack of contrast recedes.



Light against dark. Dark against light.



Contrast Comes Forward. Lack of Contrast Recedes.

Darkest

Lightest